

**PRELIMINARY ASSESSMENT/  
VISUAL SITE INSPECTION**

**SDC SERVICES, INC.  
CORPUS CHRISTI, TEXAS  
TXD030923361**

**Prepared for**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 6  
1455 Ross Avenue  
Dallas, TX 75202**

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## EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSİ) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the SDC Services, Inc. (SDC), facility in Corpus Christi, Texas. This report summarizes the results of the PA/VSİ and the potential for releases of hazardous wastes or constituents from SWMUs and AOCs.

SDC operates a used oil and gasoline and water mixture recycling facility. The used oil is received from various municipal and industrial facilities. The gasoline and water mixtures are received from facilities that have either cleaned or removed underground storage tanks (UST). SDC recycles this material by placing it in aboveground storage tanks (AST) and USTs, allowing it to separate into various phases by gravity. The lighter-phased hydrocarbons that exhibit ignitable characteristics are then removed from the tanks, placed into storage tanks, and blended with other hydrocarbon materials that have similar characteristics. This mixture is stored in tanks until it is sold to asphalt manufacturing facilities that will use this recycled material as a fuel in their furnaces. As a result of its recycling activities, SDC generates toxic (D008 and D009), ignitable (D001), and listed (K049) waste tank bottoms and other wastes that are identified by the Texas Water Commission (TWC) as Class I hazardous (H) and Class II nonhazardous (NH).

In 1978, SDC began its operation at 7251 Up River Road in Corpus Christi; in 1980, it relocated its operations to its current location at 7500 Greenwood Drive in Corpus Christi, Texas. SDC is owned and operated by Mr. Homer Hines. Several other unrelated businesses are also operated from this facility. The facility occupies 7.33 acres in a mixed-use, agricultural, and light industry area on the south side of Corpus Christi and currently employs about 25 people.

In October 1985, TWC issued SDC hazardous waste permit HW-50059-001 to operate as a treatment, storage, and disposal facility (TSDF). Because of financial and regulatory considerations, SDC never activated the permit but chose to continue recycling waste oil materials. In November 1990, SDC submitted Part A and Part B renewal applications with the intent of creating a hazardous waste treatment and recycling facility. However, SDC still only recycles the used oil to be sold as a fuel.

The SDC facility has had a history of waste oil releases documented in past TWC inspections. During the VSI, additional information about releases from units at the facility was also obtained through discussions with Mr. Tim Chaney, facility environmental director. Documented releases have included (1) waste oil contaminated with pesticides, which was sprayed on soil in 1982, (2) waste oil and wastewater from facility process areas, as well as drainage of these waste materials off-site, in 1989, 1990, and 1991, and (3) disposal of chromium-contaminated sludge blended with soil in 1990. According to the information obtained from the files and from interviews at the facility, TWC has issued corrective actions for several of these releases, and SDC has been cooperative in responding to the TWC corrective actions. However, details of the corrective measures implemented by the facility were not available in the files reviewed.

During the PA and VSI, PRC personnel identified 13 solid waste management units (SWMU) and 2 areas of concern (AOC). The SWMUs are (1) south blending unit, (2) south loading area, (3) north blending unit, (4) north loading area, (5) four inactive frac tanks, (6) frac tank 6, (7) inactive tank area, (8) tank 16, (9) two skid tanks, (10) container storage area, (11) waste oil tank, (12) chromium contaminated soil area, and (13) tank 2000. The AOCs are (1) north blending storage tank area, and (2) fuel and solvent storage tank area.

PRC recommends a site investigation (SI) for the north and south blending units (SWMUs 1 and 3), the north and south loading areas (SWMUs 2 and 4), frac tank 6 (SWMU 6), tank 2000 (SWMU 13), and the north blending storage tank area (AOC 1). The investigation would be to determine the existence of subsurface soil and ground-water contamination. These facilities and the storage tank have a documented history of waste hydrocarbon releases of unknown quantities. The potential for release to surface water and on-site soils is moderate to high due to a limited secondary containment structure which might inhibit minor spills. The potential for release to ground water is moderate to high due to the nature of the waste releases and a moderately low permeability clay substrata. The potential for release to air is considered moderate due to the volatile nature of gasoline constituents in wastewater collected from underground storage tank closures and delivered in unknown quantities to the facility.

PRC recommends an SI for the container storage area (SWMU 10) which should address possible soil contamination under the concrete slab storage area and surrounding exposed soil areas. This area was previously a tank farm associated with the south blending unit and reportedly was used to store wastes. While no evidence of release was documented during the VSI,

past operations reportedly resulted in some releases. No site cleanup was performed before construction of the concrete slab. The potential for release to surface water is low due to a lack of surface contamination. The potential for release to on-site soils, ground water, and air is unknown.

PRC recommends an investigation of the remaining storage tanks situated at various locations at the west end of the SDC facility as part of the pending closure of these tanks. These include frac tanks 2, 3, and 4 (SWMU 5), and the eight inactive tanks in the inactive tank area (SWMU 7). Tanks 5A, 5B, 5C, and 5D in the inactive tank area are suspected sources of the chromium sludge. These units are currently inactive, pending closure, and the potential for release of hazardous constituents to surface water, soils, ground water, and air is unknown. An SI should also include investigation of soils in the vicinity of inactive frac tank 1 (SWMU 5), tank 16 (SWMU 8), and skid tanks 2 and 3 (SWMU 9). The investigation should address subsoil contamination and possible ground-water contamination.

PRC recommends an SI and removal action for the chromium-contaminated soil area (SWMU 12). The chromium waste is located in an open area in the center of the west end of the facility and represents an immediate threat to SDC employees through direct contact with the contaminated soil. Secondary targets are wetlands affected by surface runoff to Vollo Creek and, subsequently, to Oso Creek.

PRC recommends an SI for the fuel and solvent storage area (AOC 2) to determine the presence of soil contamination in the surrounding area and in the ground water. Evidence of a release was visible from distressed vegetation within the secondary containment area. The release appears to have been contained within the enclosure, but the nature and quantity of the material are unknown.

## **DISCLAIMER**

This report was prepared for the U.S. Environmental Protection Agency (EPA), Region 6, by PRC Environmental Management, Inc. (PRC), in fulfillment of Contract No. 68-W9-0006, Work Assignment No. C06069. The opinions, findings, and conclusions expressed herein are those of PRC and not necessarily those of EPA or other cooperating agencies. Mention of company or product names is not to be considered an endorsement by EPA.

This document is intended to (1) assist EPA in screening sites, and (2) facilitate EPA's assignment of site priorities for corrective action. Under the EPA Region 6 Environmental Priorities Initiative, the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) programs are working together to identify and rank RCRA facilities that require corrective action. The preliminary assessment/visual site inspection (PA/VSI) is the first step in ranking facilities for corrective action. EPA must exercise its technical judgment in using the PA/VSI Report, as well as other relevant information, in determining which facilities require corrective action.

## 1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C06069 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 6.

As part of the EPA Region 6 Environmental Priorities Initiative, the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in prioritizing facilities for corrective action. Through the PA/VSI process, information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous wastes.

SWMUs include the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred, or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a future release is considered a strong possibility.



The purposes of the PA are as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes a review of all relevant documents and files located at state offices and at the EPA Region 6 office in Dallas, Texas.

The purposes of the VSI are as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm operational, SWMU, AOC, and release information obtained during the PA.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the SDC Services, Inc. (SDC), facility in Corpus Christi, Texas. The PA was completed on May 22, 1992. PRC gathered and reviewed information from the Texas Water Commission (TWC) and from EPA Region 6 RCRA files. The VSI was conducted on May 29, 1992. It included interviews with an SDC facility representative and a walk-through inspection of the facility. Twelve SWMUs and two AOCs were identified at the facility. Background information on the facility's location, operations, waste generating processes, history of documented release, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of

operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0.

Appendix A includes a summary of the VSI and photographs. Field notes from the VSI are included in Appendix B.

## **2.0 FACILITY DESCRIPTION**

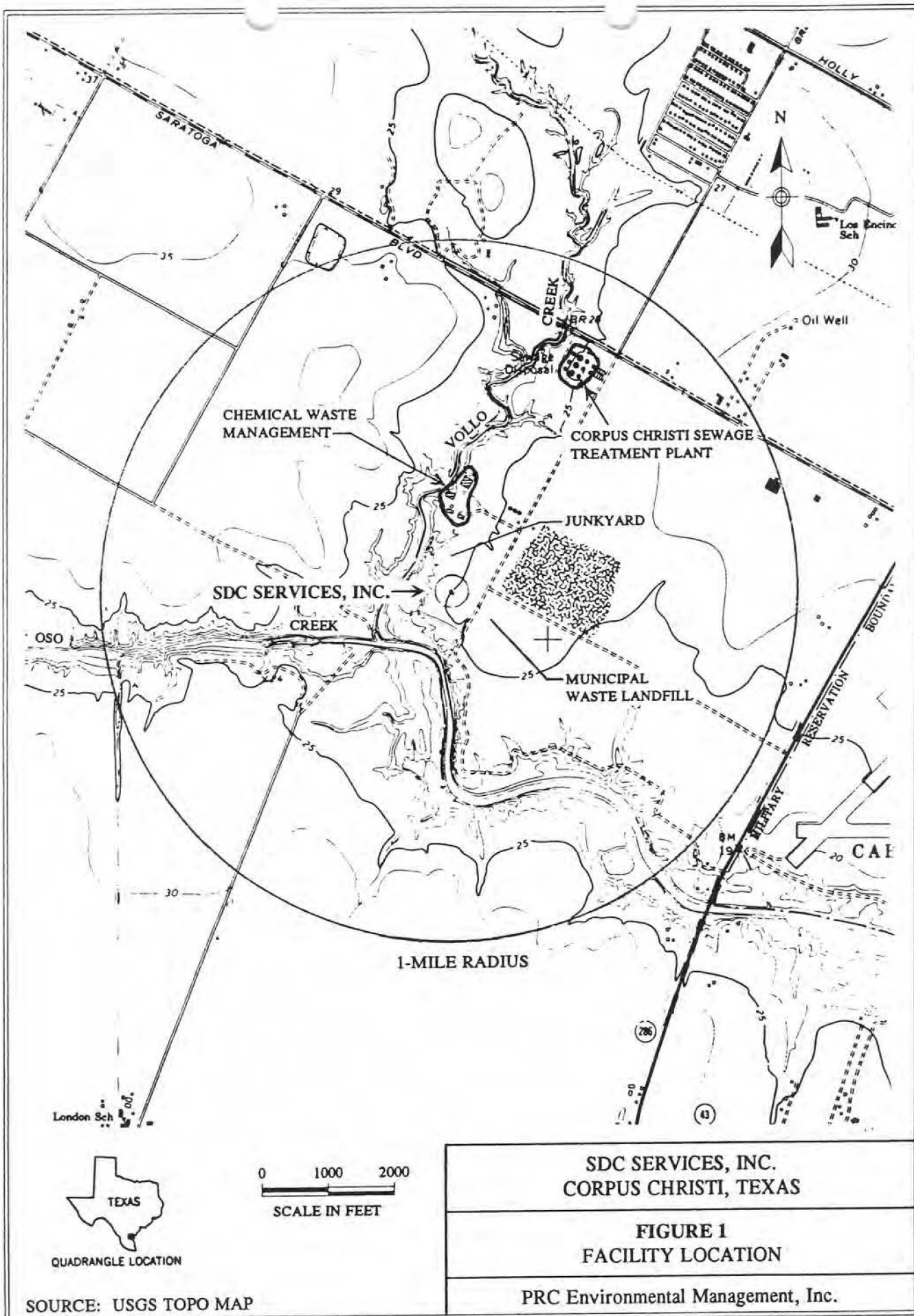
This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

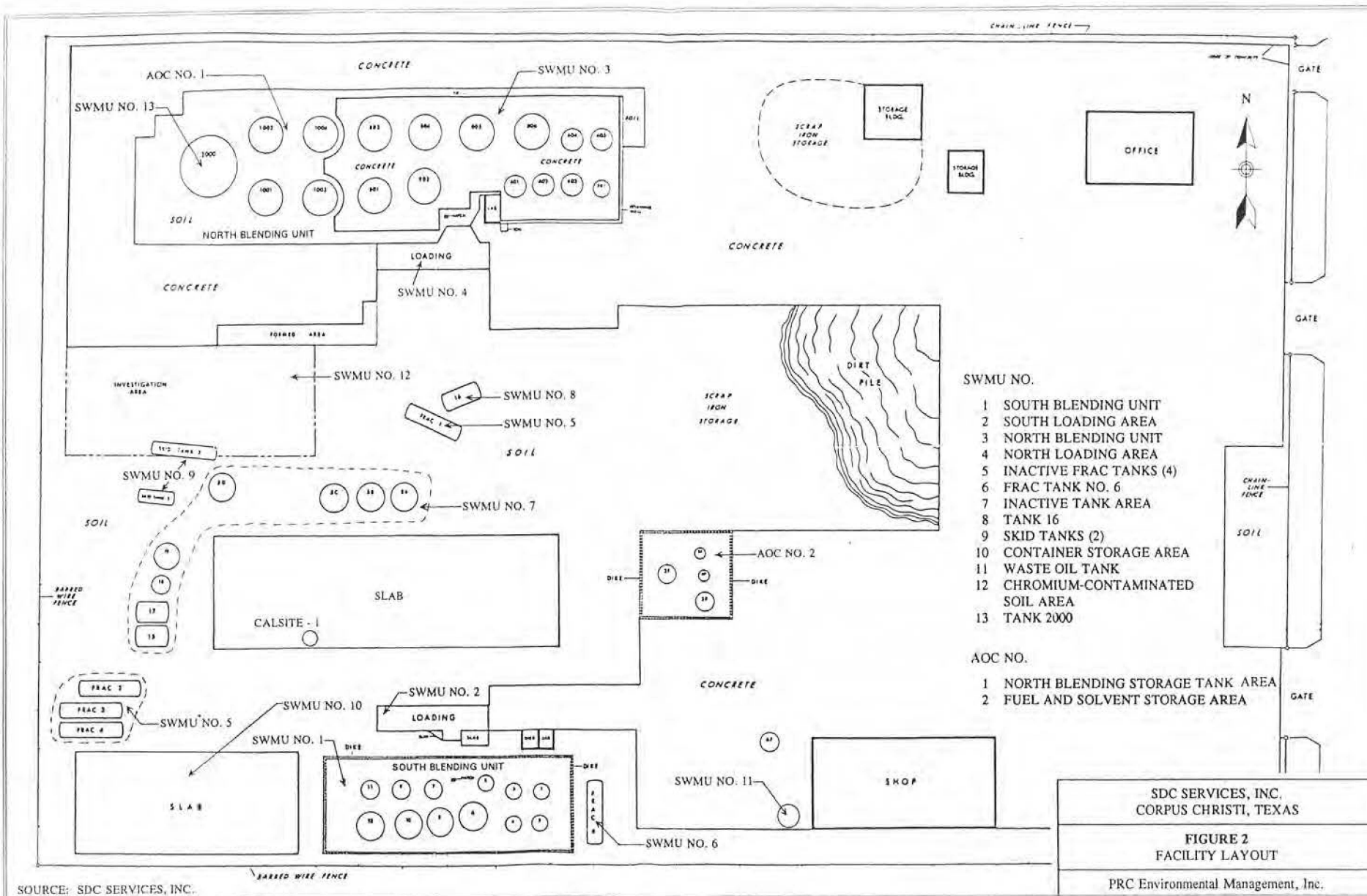
### **2.1 FACILITY LOCATION**

The SDC facility is located at 7500 Greenwood Drive, Corpus Christi, Nueces County, Texas (Figure 1). The facility coordinates are latitude 27°43'37" N and longitude 97°27'54" W. The facility occupies 7.33 acres in an area that is sparsely populated. Land use around the facility includes agriculture, light industry, and several residential areas. SDC is bordered on the north by (1) an operation believed to be a junk business, (2) Chemical Waste Management's waste disposal facility, and (3) Corpus Christi's sewage treatment plant; on the west by Vollo Creek; on the south by (1) SDC's Southwest Environmental Services, Inc., property, and (2) Oso Creek; and on the east by the municipal waste landfill (Figure 1).

Physical structures at the facility include (1) a main office located at the northeast corner of the property, (2) a maintenance shop located at the south side of the property, (3) two storage buildings located in the north-central portion of the facility, (4) a mobile home for the on-site watchman, (5) a metal office building associated with an unrelated oil field business in the southeast corner of the property, and (6) several aboveground storage tanks (ASTs) and two underground storage tanks (UST) used to treat and store the blended fuel products and wastes (Figure 2).

There are two entry points, located on the east side of the facility, through sliding gates in a 3.5-foot-high cyclone fence. The cyclone fence extends along the north property line. A three-strand barbed wire fence, about 3 feet high, is located on the west side of the facility, and a





SOURCE: SDC SERVICES, INC.

3-foot-high galvanized wire fence is located on the south side of the facility. Security at the SDC facility includes an on-site resident employee and posted warning signs, in English only, at the east entrance.

## **2.2 FACILITY OPERATIONS**

SDC has operated at its current address since 1980 as a used oil recycler, producing burner fuel for sale to local asphalt plants. The recycling of this material is conducted in several ASTs and USTs at the facility. As a result of its recycling operations, SDC generates wastes that are temporarily stored on-site. When an adequate volume of the wastes is accumulated, it is transported off-site to an approved disposal facility. The wastes are also stored in ASTs or in 55-gallon drums at the facility.

SDC purchases the used oil and the waste hydrocarbon mixtures from local automobile service centers and industrial facilities. SDC owns and operates a fleet of trucks that are used to collect and transport these materials from the generating facilities to its facility. These materials are not regulated, since the materials are to be recycled for use as fuel for energy recovery. However, if the used oils exhibit RCRA hazardous waste characteristics, or have hazardous constituents associated with them, the used oil can be regulated by RCRA. To characterize the used oils that are purchased, SDC requires that the generating facilities collect a sample of the used oil and submit it for analysis. If the used oils do not exhibit RCRA hazardous characteristics, SDC will purchase the used oil for recycling. According to facility personnel, SDC requests only that the generators test the used oil if SDC suspects that the used oil has hazardous constituents or exhibits hazardous characteristics.

After transporting the used oil and gasoline and water mixtures to its facility, SDC pumps the materials into one of its ASTs at the south or north blending units (SWMUs No. 1 and 3) (Figure 2). The tanks at these units are used to gravimetrically separate water and solid constituents from the hydrocarbon materials (phase separation) without the use of any chemical treatments or refining processes. The finished product is stored at either blending facility, depending on available storage capacity, but mainly at one of the four north blending storage tanks (AOC No. 1), and mixed with spent Varsol™ that is generated at SDC. This hydrocarbon and Varsol™ mixture is stored in these tanks until the material is sold to an off-site facility to be used as a fuel.



In November 1990, SDC resubmitted Part A and Part B permit applications to become a treatment, storage, and disposal facility (TSDF) for hazardous wastes. SDC is interested in providing treatment and recycling services for a range of hazardous wastes. SDC is reviewing investment opportunities to realize the complete reconstruction of the existing facility for this new operation. The Part A and Part B Permit application are currently under review by TWC.

## **2.3 WASTE GENERATING PROCESSES**

SDC generates hazardous and nonhazardous wastes. Both types of waste are generated by the recycling process and routine maintenance activities conducted at the facility. These wastes are managed by the facility through either storage or mixing with the recycled oil that is sold as a fuel. The units in which the wastes are managed consist of ASTs and USTs at the facility. The wastes generated by the facility are summarized in Table 1.

The hazardous wastes generated by its used oil and waste hydrocarbon processing include (1) hazardous tank bottoms (D008, D009, and K049) and (2) oil wastes (D001). The nonhazardous wastes include (1) nonhazardous wastewater from oil separation (TWC Class I), and (2) nonhazardous tank bottoms (TWC Class I). These wastes are stored in one of several tanks in SWMUs No. 1 and 3. Although these tanks were identified as process tanks, they are also identified as waste storage tanks, because the facility does not have a specified design of flow from one tank to another. The recoverable hydrocarbon phase is removed, leaving the wastewater and the solid phase materials. These wastes are stored in these tanks until an adequate volume of wastes is collected for shipment to an off-site disposal facility. However, there is no record of off-site shipment of wastes by SDC since 1985. Also, SDC has no monitoring procedures to determine the quantities of wastes accumulated in the process tanks.

The facility produces hazardous and nonhazardous wastes from general maintenance operations. These wastes include spent Varsol™, used oil from facility vehicles, oil-contaminated materials, and antifreeze. The spent Varsol™ (D001), a solvent used in degreasing activities, is removed from service and blended with used oil in the production of the burner fuel. Waste crankcase oil is generated from company vehicles and stored in an on-site storage tank before it is transferred to the process units (SWMUs No. 1 and 3). Oil-contaminated materials from on-site operations - including soil, oil absorbent, protective clothing, and engine oil filters - are placed in



TABLE 1		
SOLID WASTES		
Waste/EPA Waste Code	Source	Primary Management Unit <sup>a</sup>
Tank bottoms/D008/D009/K009	Used Oil processing	South blending unit North blending unit Tanks 1-12, 401-405, 301, 801-806, 2,000
Oily wastes/D001	Used oil processing	South blending unit, Tank unit 11
Wastewater/TWC Class I-NA	Used oil processing	South blending unit North blending unit Tanks 1-12, 401-405, 301, 801-06, and 2,000
Tank bottoms/TWC Class I and 11-NA	Used oil processing	South blending unit, North blending unit, Tanks 1-12, 401-405, 301, 801-806, and 2,000
Spent Varsol™ solvent/D001	Degreasing activities	Tanks 1001-1004 and waste oil tank
Used oil/TWC Class I-NA	SDC company vehicles	Waste oil tank
Oil-contaminated materials/NA	SDC operations	Container storage area
Used antifreeze/NA	SDC company vehicles	Container storage area, Tank 16

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Notes:

- <sup>a</sup> Primary management unit refers to a SWMU that currently manages or formerly managed the waste.

NA = Not applicable (designates nonhazardous waste).

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a sealed 55-gallon barrel and temporarily stored at the container storage area (SWMU No. 10) before shipment to an appropriate off-site disposal facility. Used antifreeze is also stored at the container storage area before shipment off-site for reclamation.

## **2.4 RELEASE HISTORY**

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the SDC facility.

In December 1982, oil wastes were spread on soil in the vicinity of SDC process tanks for soil stabilization before the placement of a caliche pad in what is now the south blending unit. Oil stains from runoff extended about 10 feet beyond the west property boundary. Soil and water samples were collected by the Texas Department of Health (TDH) near the tanks where most of the waste oil was spread. Analysis of the samples indicated significant levels of lead and pesticides. The TWC District 12 office required that SDC delineate the extent of soil contamination, and remove and dispose of the material properly. It was noted that the owner, Mr. Homer Hines, was cooperative in the cleanup operation (Schwartz, 1983; Stanley, 1985; TDWR, 1983; TWC, 1985a). However, details of cleanup work performed by the facility was not found in the files reviewed.

In June 1989, TWC conducted an inspection, during which chronic spillage of oil was noted. This inspection documented a substantial amount of oil and water within the secondary containment structure of the south blending unit (SWMU No. 1) and a discharge of oily wastewater from the unit. The south blending unit was the site of the release. The area of spillage was reportedly covered with fresh soil, rather than cleaned, when the facility was revisited the following day. No samples were collected but the areas of concern were photographed. Subsequent corrective action taken by SDC involved the cleanup of contaminated areas and the repair of the secondary containment structures. TWC indicated satisfaction with the corrective actions (Clewis, 1989; Hines, 1989; Volz, 1989a; and Volz, 1989b).

On July 19, 1990, TWC conducted an inspection in response to an anonymous complaint. The inspection resulted in the discovery of an unknown green waste disposed of on the ground at the west end of the SDC facility. Both the TWC and SDC collected soil samples of the unknown green waste for laboratory analysis. The results of the analysis indicated lead levels of 388 parts

per million (ppm) and total chromium levels of 23,800 ppm in the soil samples collected from the rear of the property near the edge of the concrete pad.

TWC sent a Notice of Violation to SDC, instructing that an investigation and cleanup of contaminated areas be performed. Investigation and cleanup of this area, designated by PRC as SWMU 12, is ongoing. The chromium-contaminated area is still at the facility, and a closure action is pending, pursuant to review and approval by TWC (Chaney, 1991a; Core, 1990; TDH, 1990; TWC, 1991b; TWC, 1991c, and Volz, 1990). Additionally, areas of the SDC facility were noted to be contaminated with oily wastes, and the containment structure at the south blending unit had been compromised, allowing the release of waste oil and contaminated wastewater from the facility.

In April 1991, during a TWC solid waste inspection, oil waste was documented on unprotected soil next to tanks 8, 10, and 12 of the south blending unit, and around loading areas at both the north and south blending units. No samples were collected, but the release areas were photographed. TWC notified SDC of its noncompliance with solid waste rules and requested a response, including corrective actions. The contaminated soil was removed from the process area and placed in sealed drums stored at the container storage area. No TWC response was found in the files (Chaney, 1991b; Phillips, 1991; TWC, 1991a; and Volz, 1991).

In August 1991, TWC performed a VSI as part of a RCRA facility assessment (RFA). During the VSI, evidence of waste releases from various SWMUs was noted. An oily wastewater mixture was noted leaking from portable frac tank 6 (SWMU No. 6) at the east end of the south blending unit. The leak had resulted from overfilling and a leaking valve. A nonspecific release from one or more storage tanks in the south blending unit was evidenced by an oily sheen on rainwater within the secondary containment area. Soil in the vicinity of the north and south blending units underground vessel and loading area was oil stained. The north blending unit had a nonspecific release of waste oil, indicated by an oil sheen on standing rainwater.

The area previously identified as a chromium-contaminated sludge disposal site was again noted. Tanks 5-A, 5-B, 5-C, and 5-D (SWMU No. 7) were recorded as possible sources of the chromium sludge waste deposited on open soil at the facility; evidence of past leakage was indicated from all four of these tanks. The tanks are currently inactive. Additionally, tank 21 was reported as releasing waste oil through a leaking valve. No secondary containment surrounds this unit.

No samples were collected during the VSI, but contamination was photographed.

The TWC RFA report includes recommended remedial actions to address the observed releases. However, the files do not include any record of subsequent TWC notification of noncompliance or of SDC action (TWC, 1991c).

## **2.5 REGULATORY HISTORY**

Mr. Homer Hines, owner and operator of SDC, submitted a notification of hazardous waste activity to EPA on August 15, 1980. The facility submitted Part A and Part B Hazardous Waste Permit applications on November 18, 1980, for a RCRA treatment, storage, and disposal facility (TSDF). The application specified a facility container storage (S02) capacity of 420,000 gallons and an estimated 10,080 gallons of annual waste storage (D001). The nature of the SDC business was stated to be the purchase, sale, transport, and storage of waste oil materials. TWC held adjudicative public hearings on the SDC permit on April 12 and July 11 and 12, 1985 (Stanley, 1985; TWC, 1985b). Based on the findings of the hearings, TWC issued hazardous waste permit HW-50059-001 to SDC to store and process hazardous waste and to blend those materials with waste oils for sale as boiler fuels (TWC, 1985c).

The permit authorized SDC to manage, store, and process industrial solid wastes - including those generated off-site - and limited them to the Hazardous Code Groups Ignitable (I), Toxic (T), and EP Toxic (E) (TWC, 1985c). The permit prohibited SDC from accepting wastes containing (1) polychlorinated biphenyls (PCB), as defined by EPA in regulations issued under the Toxic Substance Control Act (TSCA), (2) explosive materials, as defined by the Department of Transportation (DOT) under 49 Code of Federal Regulations (CFR) Part 173, (3) 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), as defined by 40 CFR Part 261, and (4) wastes that cannot be processed for reclamation by methods authorized in Provision II.B.18.

The TSDF permit identified 17 SWMUs authorized for operation in the formulation of fuels from wastes by gravity separation and blending (TWC, 1985c).

SDC had compliance problems as early as 1982. TDWR investigated the facility in 1982 for spraying oil wastes on unprotected soils at the facility. Pesticides were detected in collected samples and the TDWR District 12 office required delineation and site cleanup by SDC (Stanley, 1985). In 1983, a TDWR sampling inspection identified listed hazardous wastes in

several SWMUs (tanks) at the SDC facility. The owner, Mr. Homer Hines, was requested to implement a screening procedure to minimize receiving hazardous wastes in purchased waste hydrocarbons (Stanley, 1985). A TDWR inspection on August 7, 1984, revealed two areas of noncompliance - improperly completed waste manifests for SDC-generated wastes and failure to make hazardous waste determinations on purchased waste hydrocarbons (Stanley, 1985). TDWR performed a facility investigation in response to a complaint on May 7, 1985, and documented a violation regarding acceptance of waste hydrocarbons without an adequate screening system. TDWR recommended that a screening mechanism be implemented immediately (Stanley, 1985).

In March 1986, Mr. Homer Hines submitted a notification of hazardous waste activity to EPA, identifying SDC as a used oil marketer.

On August 19, 1986, TWC performed an annual solid waste inspection at the SDC facility and observed that, although SDC had a hazardous waste permit, it had decided not to activate this permit and to operate only as a nonhazardous used oil recycler. This action was based on both economic and regulatory considerations. SDC had not acquired the financial assurance necessary to operate as a hazardous waste facility (Volz, 1990).

Information noted on the 1986 inspection report resulted in EPA indicating that SDC did not have a fully effective permit under RCRA and the Hazardous and Solid Waste Amendments (HSWA) of 1984. EPA stated that the lack of a RCRA facility assessment (RFA) before the issuing of the permit rendered it invalid. Therefore, SDC was considered to have interim status (Hibbs, 1987).

On August 15, 1991, TWC completed an RFA report on the SDC facility. This report identified (1) previous and current areas of release, including the chromium-contaminated area, (2) releases at both the north and south blending units, and (3) releases at other SWMUs at the facility (TWC, 1991c). No record of a TWC letter of noncompliance or SDC response was on file.

A May 1989 inspection by the TWC District 12 office noted violations, including (1) the lack of required regulatory documentation, (2) a release of oily wastes and wastewater both on- and off-site and (3) hazardous and nonhazardous waste shipments off-site without manifests (Clewis, 1989). TWC accepted the SDC response to these allegations as satisfactory (Volz, 1989). On July 19, 1990, TWC conducted a facility inspection in response to a complaint. During the inspection, several violations were documented, including (1) unauthorized disposal of wastewater



at regulated disposal well facilities, (2) discharge of oily wastes and wastewater from the facility, (3) disposal on facility grounds of an unknown waste identified as containing chromium, (4) release to facility soils of oily wastes, and (5) detection of an ignitable hazardous waste material in one of the SWMUs. TWC noted that the SDC facility was no longer in compliance with its original permit to manage such wastes and requested a screening plan to prevent such reoccurrences (Volz, 1990). SDC responded in a January 24, 1991, letter to TWC with proposed actions addressing the areas of noncompliance (Chaney, 1991a).

On November 29, 1990, SDC submitted new Part A and B permit applications to be repermitted to operate as a TSDF. TWC action on this application is pending.

Under the current permit, SDC is required to inspect and test the tanks for potential leaks. However, information concerning the tests was not available in the files reviewed.

SDC is not required to have operating air permits and has no history of air compliance problems. The facility has no history of odor complaints from area residents. SDC is remotely located, with few surrounding residential areas.

The facility is not required to have a National Pollutant Discharge Elimination System (NPDES) permit. Current SDC facility operations generate wastewater, classified as a TWC Class I nonhazardous waste, that is periodically disposed of at a regulated disposal facility.

## **2.6 ENVIRONMENTAL SETTING**

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the SDC facility.

### **2.6.1 Climate**

The climate in Nueces County is dry subhumid. The average daily temperature is 72.2°F. The lowest average temperature is 46.1°F in January, and the highest temperature is 94.2°F in July.

The total annual average precipitation for the county is 30.18 inches (Bomar, 1983; NOAA, 1982). Of this, 20.90 inches, or almost 70 percent, falls between May and October. The mean



annual lake evaporation is about 40 to 50 inches (Bomar, 1983). Thunderstorms occur on about 29 days each year. The 1-year, 24-hour maximum rainfall on record is 8.9 inches in August 1980. The average relative humidity in Corpus Christi is about 86 percent in the morning and 63 percent in the afternoon (Conway and Liston, 1990).

The prevailing wind is from the south-southeast. The monthly average wind speed is highest in April, at 14.4 miles per hour (mph) from the southeast (Lenz, 1992). The annual average wind speed is 12.0 mph from the southeast (Lenz, 1992).

The hurricane frequency for Corpus Christi is defined as a 7 percent annual probability of occurrence along a 50-mile segment of coast in the area of Corpus Christi (White, and others, 1983).

#### **2.6.2 Flood Plain and Surface Water**

The SDC facility is not located within a 100-year flood plain (Federal Emergency Management Agency, 1985). The nearest surface water body, Vollo Creek, is located about 400 feet northwest of the facility and is a tributary to Oso Creek, located about 2,000 feet south-southwest. Oso Creek is an estuarian stream with tidal influence extending upstream. The stream contains numerous wetland environments, including salt, brackish, and freshwater marshes along its reach (White, and others, 1983). Oso Creek discharges into Oso Bay, about 10 miles southeast of the SDC facility. Oso Bay is connected to Corpus Christi Bay, which eventually drains into the Gulf of Mexico.

Surface water drainage at SDC is to the northwest, down the center of the facility, into an open field, and ultimately into Vollo Creek. Vollo Creek also receives effluent discharge from the Corpus Christi wastewater treatment plant, upstream from the SDC facility.

Neither creek is used for recreation or as a source of potable water. The City of Corpus Christi receives its potable water supply from Lake Corpus Christi, a reservoir on the Nueces River, about 45 miles northwest of the city.

### 2.6.3 Geology and Soils

The geology of Corpus Christi is composed of sedimentary deposits originating from coastal systems similar to the present active Texas coastal zone. The active and relict coastal systems are divided into three main groups, based on their relative ages. These include (1) coastal systems that originated more than 18,000 years ago during various interglacial periods of the Pleistocene ice age, (2) Holocene systems that originated between about 18,000 and 4,500 years ago, and (3) Modern natural systems that have been in development since about 4,500 years ago. These natural coastal zone systems of environments comprise fluvial-deltaic, barrier-standplain-chenier, bay-estuary-lagoon systems, and eolian (wind) systems. The geological environment in the vicinity of the SDC facility is defined as a Pleistocene fluvial-deltaic system (Brown, and others, 1976).

The general surface stratigraphy of the coastal region, including Corpus Christi, comes from the Pleistocene and Modern periods, and is subdivided into three main surface formations - the Deweyville, Beaumont, and Lissie Formations. In the vicinity of the SDC facility, the surface formation is the Beaumont Formation, about 100 feet thick (University of Texas, no date). Underlying this formation, from the same Pleistocene period, is the Lissie, followed by the Goliad-Willis Formation of the Pliocene period and the Fleming from the upper Miocene period (Solis, 1981).

The Beaumont Formation consists mostly of clay, silt, and sand deposited as meanderbelt, flood basin, crevasse splay, natural levee, deltaic, barrier bar, and lagoon facies. It weathers in rich, dark soils crossed by meandering, low sand ridges. Clays are bluish gray and include calcareous nodules (Solis, 1981). In the SDC vicinity, the surface soils associated with the Beaumont Formation are classified as Victoria clays and consist of black, calcareous, crumbly soils that are called black land. These soils are prone to cracking when dry and swelling when wet, and are poorly drained and slowly permeable. The dark gray surface layer is heavy clay that contains lime and is about 3 feet thick. The soil structure is fine and granular. The subsoil is clay about 18 inches thick; it is gray in the upper parts and grades to lighter in its lower part. The subsoil contains pockets and seams of dark gray material that fell from the surface layer when dry. The parent material is very pale brown, limy clay that contains a few fine lumps of lime. The range of permeability values for the Victoria clay is from  $7.06 \times 10^{-6}$  to  $1.41 \times 10^{-4}$  centimeter per second (cm/sec) (U.S. Department of Agriculture, 1965).

#### 2.6.4 Ground Water

Geologically, aquifers in the Gulf Coast area range in age from the Miocene to the Pleistocene periods. In the Corpus Christi area, they occur beneath the sand-poor Beaumont aquitard and are contained mostly within the sands of the Lissie, Upper Goliad-Willis, and Fleming Formations (Solis, 1981).

Ground water is produced from two aquifer systems, the upper and lower Chicot and Evangeline sands. The aquifers are defined as multiple-confined systems with recharge by precipitation occurring in outcrop areas, generally to the northwest (Kasmarek, 1992). The Chicot formation has been logged at depths extending to about 800 feet, and the Evangeline extends below the Chicot down to about 2,200 feet. Underlying the Evangeline is the Burkeville confining system, extending to 3,400 feet (Baker, 1979). In the vicinity of the SDC facility, on the southwest side of Corpus Christi, most of the ground-water wells are completed in the Chicot Aquifer, with the deeper Evangeline wells generally much fewer. Water elevations in both of these aquifer systems vary because of the laterally nonisotropic properties of the formations. Within a 4-mile radius of SDC, recorded Chicot ground-water levels range from about 13 to 50 feet, and Evangeline levels range from about 10 to 30 feet. Ground-water quality in this area is poor and nonpotable, with reported total dissolved solids of from 1,600 to 2,800 mg/L, chlorides of from 500 to 850 mg/L, and sulfates from 300 to 800 mg/L (Texas Water Development Board, 1992). Water is reported as brackish to saline, and use is generally restricted to small-scale agricultural and lawn watering. Potable quality ground water is generally produced further inland, in the vicinity of Robstown, about 10 miles west of SDC (Moore, 1992; Mortin, 1992; and Young, 1992).

In the SDC vicinity, the Chemical Waste Management facility has numerous monitoring wells that indicate the presence of a near-surface ground-water zone at about 20 feet. The flow direction at this site is northwest, toward Vollo Creek (Lewis, 1992).

The City of Corpus Christi is totally dependent on surface water for its potable water supply. Lake Corpus Christi, a reservoir on the Nueces River, about 45 miles northwest of the city, supplies the needs of Corpus Christi. Businesses and residences in the SDC vicinity are supplied with potable water from the city system. There are numerous privately-owned ground-water wells within a 4-mile radius of SDC but, according to available information, none are used for potable consumption (Mortin, 1992, and Young, 1992).

### 2.6.5 Receptors

The SDC facility occupies about 7.33 acres in a mixed use area, southwest of Corpus Christi, Texas. Corpus Christi has a population of about 257,453 and is located in Nueces County, which has a population of 291,145 (Dallas Morning News, The, 1991). The school nearest the facility, Los Encinos School, is located about 1.5 miles northeast. Residential areas also fall within a 1.5-mile radius, mainly north of SDC.

SDC is bordered on the north by (1) an operation believed to be a junk business, (2) Chemical Waste Management's waste disposal facility, and (3) Corpus Christi's sewage treatment plant; on the west by Vollo Creek; on the south by (1) SDC's Southwest Environmental Services, Inc., property, and (2) Oso Creek; and on the east by the municipal waste landfill. Access to SDC is controlled by 3 different types of fencing surrounding the site. There is a 24 hour on-site security employee.

The nearest surface water bodies are Vollo Creek, located 400 feet northwest and Oso Creek, 2,000 feet south southwest of the facility. Neither stream is used for industrial, agricultural or municipal water supplies. Vollo Creek, a tributary of Oso Creek, receives the effluent discharge from the city sewage treatment plant. No fisheries are known to exist, and there is no recreational activities on these rivers. Other surface water bodies in the Corpus Christi area include the Corpus Christi Bay, Laguna Madre, Nueces River, Nueces Bay, and Oso Bay.

Ground water is not used as a drinking water supply. Because of salinity, private residential wells in the SDC vicinity are limited to lawn watering and small-scale agricultural use. Potable ground water is reported in the vicinity of Robstown, Texas, about 10 miles west of SDC. Ground-water quality downgradient toward Corpus Christi Bay continues to deteriorate because of an encroaching salt water wedge (Mortin, 1992; Solis, 1981; Young, 1992).

Sensitive environments in the SDC vicinity include multiple wetlands associated with Oso Creek, an estuarine river. There are no wetlands at the SDC facility. Within a 2-mile radius, downstream of the facility, are several wetland areas classified as emergent or open water palustrine environments. Further downstream, within 4 and 15 miles of SDC, the frequency of wetlands increases significantly into numerous areas classified as intertidal and subtidal estuarine environments (U.S. Department of Interior, 1979). The nearest wetland area is located about 2,600 feet south-southwest of the facility. These wetlands support a broad variety of vegetation

and wildlife, and were identified as likely habitats for several species designated by federal and state agencies as threatened or endangered (Cooper, 1992; Sullivan, 1992). In the Oso Creek area, these include (1) sheep frog, (2) jaguarundi, (3) ocelot, and (4) slender rushpea. In the Oso Bay area, these include (1) piping plover, and (2) brown pelican.

These species have not been documented at these wetland locations but are known to frequent comparable habitats in the Corpus Christi area (Cooper, 1992).

No critical habitats are in proximity to SDC. The Padre Island National Sea Shore is about 16 miles southeast of the SDC facility.

### **3.0 SOLID WASTE MANAGEMENT UNITS**

This section describes the 12 SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC observations. SWMU information is summarized in Table 2.

#### **3.1 SWMU NO. 1 - SOUTH BLENDING UNIT**

##### **Description**

The south blending unit is located in the southwest portion of the SDC facility, between the container storage area (SWMU No. 10) and the frac tank 6 (SWMU No. 6) (Figure 2). This unit measures about 150 by 50 feet. Associated with this unit are 12 aboveground storage tanks (AST) and 1 underground storage tank (UST) (Photographs No. 1, 2, and 3). The associated secondary containment for the ASTs consists of a dike built of soil, measuring about 2 feet high. All of the tanks, except the UST, are situated on bare ground. The UST is located in the north-central portion of the unit between tanks 5 and 7 (Figure 2), and is oriented in a north-south direction. Access to the UST is through a square opening at ground surface. No secondary containment or leak detection system is associated with the UST. Table 3 summarizes all of the tanks associated with this unit by tank number, construction material, and capacity.



**TABLE 2**  
**SWMU AND AOC SUMMARY**

**Sheet 1 of 5**

	SWMU No. 1	SWMU No. 2	SWMU No. 3
Unit name	South blending unit	South loading area	North blending unit
Description	This unit is located in the southwest part of SDC and measures about 150 by 50 feet. It consists of 12 aboveground storage tanks (AST) situated on bare ground and 1 underground storage tank (UST).	This area is a paved and slightly sloped slab on the north-central side of the south blending unit.	This unit is located in the northwest corner of SDC and occupies about a 289-by-100-foot area. It consists of 12 ASTs and 1 UST. The ASTs are located on a concrete pad.
Startup	1979 (estimated)	1979 (estimated)	1986 (estimated)
Date of Closure	All tanks are active.	The unit is active.	All tanks are active.
Wastes Managed	Hydrocarbon materials that include (1) used oil (nonhazardous), (2) oily wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater (nonhazardous), (5) tank bottoms (D008, D009, K049), and (6) tank bottoms (nonhazardous).	Wastes include (1) used oil (nonhazardous), (2) oil wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater, (5) tank bottoms (D008, D009, K049), and (6) nonhazardous tank bottoms	Wastes that include (1) used oil (nonhazardous), (2) oil wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater (nonhazardous) (5) tank bottoms (D008, D009, D049), and (6) tank bottoms (nonhazardous).
Release Controls	The ASTs are surrounded by a 2-foot-high earthen dike noted for low capacity. The UST has no release controls.	The minimal release controls include a 3-foot vertical plywood splash wall on the south and a paved loading area.	The ASTs are located on a concrete pad and are surrounded on three sides by a 3-foot-high, 1-foot-thick concrete dike.
History of Documented Releases	Several releases of waste oil have occurred resulting in contaminated soil.	Several releases include (1) release of oily wastes to the soil in April 1991, (2) oil-stained soil in June 1991, and (3) stained soil in May 1992.	Releases include (1) oil-stained soil in the UST area, noted in August 1991, and (2) soil stained with waste oil, noted in May 1992.
Remedial Action Taken	Corrective action performed in 1989 included cleanup of contaminated areas and repair of secondary containment. Investigation and cleanup of the July 1990 release is ongoing. The contaminated soil resulting from the April 1991 release was removed and placed in drums in the container storage area (SWMU No. 10).	It is not known whether the facility performed any remedial action at the unit. Oil-stained soils were observed at the unit during the VSI.	None
Release Potential	High	Moderate to high	Moderate to high
Potential Pathway	Soil, surface water, ground water	Soil, surface water, ground water	Soil, surface water, ground water
Reasons	There is documented evidence of releases to soil and surface water. Stained soils were also observed within the dike area during the VSI.	There is visible evidence of releases from the unit. The unit has minimal release control.	There is documented evidence of releases from this unit to surrounding soil. Oil-stained soil was observed in the area of the UST and several areas on the concrete pad around the ASTs.
Need for Further Action	Clean up the stained soils within the diked area, and conduct sampling of the soil.	Conduct sampling and analysis of the contaminated soil in the exposed areas. Construct berms around the paved area to minimize release potential.	Clean up the oil-stained soil. Install a leak detection system at the UST. Construct a wall at the west end to provide a complete secondary containment system for this unit.



**TABLE 2**  
**SWMU AND AOC SUMMARY**

Sheet 2 of 5

	SWMU No. 4	SWMU No. 5	SWMU No. 6
Unit	North loading area	Inactive frac tanks	Frac tank 6
Description	This area is a paved area on the south-central side of the north blending unit (SWMU No. 3). On the north of the unit, there is a 2-foot concrete splash wall. There is a small spill collection sump at the base of the splash wall.	This unit consist of four frac tanks. One of the tanks is located north of the inactive tanks (SWMU No. 7) and the other three are located southwest of the inactive tanks. All four tanks are located on bare soil and each has a capacity of about 21,000 gallons.	Frac tank 6 is located on the east side of the south blending unit (SWMU No. 1) and sits on bare soil. This rectangular steel tank has a capacity of about 21,000 gallons.
Startup	1985 or 1986 (estimate)	Unknown	Unknown
Date of Closure	This unit is active.	This unit is inactive, pending closure.	This unit is active.
Wastes Managed	Hydrocarbon materials, including (1) used oil (nonhazardous), (2) oily wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater (nonhazardous), (5) tank bottoms (D008, D009, and K049), (6) tank bottoms (nonhazardous), and (7) blended waste fuel	Hydrocarbon wastes, including (1) used oil (nonhazardous) (2) wastewater (nonhazardous), (3) tank bottoms (D008, D009, K049), and (4) tank bottoms (nonhazardous)	The wastes stored in this unit have included (1) used oil (nonhazardous), (2) wastewater (nonhazardous), (3) tank bottoms (D008, D009, and K046), and (4) tank bottoms (nonhazardous).
Release Controls	On the north side, the unit has a 2-foot concrete splash wall. A rectangular sump is located at the base of the splash wall and drains into the north process unit UST. There is minimal release control on other sides.	The unit is on exposed soil with no form of release control.	This unit is on bare soil with no form of release control.
History of Documented Releases	Releases include oil waste on exposed soil noted in April 1991, August 1991, and May 1992.	No releases have been documented.	A release of oily wastewater resulting from overfilling and a leaking valve was reported during an August 1991 TWC inspection.
Remedial Action Taken	None	None	No information available
Release Potential	Moderate to high	Low	High
Potential Pathway	Soil, surface water, ground water	Soil, surface water, ground water	Soil, surface water, ground water
Reasons	There is documented evidence of releases to exposed soils around the unit.	The tanks are inactive.	The unit is still leaking oil waste material.
Need for Further Action	Clean up the contaminated soil around the unit. Construct berms around the paved area to minimize release potential.	Close the unit and conduct sampling to determine whether the surrounding soils have been contaminated.	Inspect soils surrounding the unit. Clean up the contaminated area. Repair the leaking valve.

TABLE 2

## SWMU AND AOC SUMMARY

## Sheet 3 of 5

	SWMU No. 7	SWMU No. 8	SWMU No. 9
Unit name	Inactive tank area	Tank 16	Skid tanks
Description	The inactive tank area is located in the west-central portion of the facility. The unit consists of eight steel tanks, both vertical and horizontal, located on bare soil.	Tank 16 is located next to frac tank 1 (SWMU No. 5) in the center of the west end of the facility. The unit is on exposed soil and is a horizontal, aboveground, cylindrical steel tank with a capacity of 10,500 gallons.	The skid tanks are located in the west-central portion of the facility and within the chromium-contaminated soil area (SWMU No. 12). The three skid tanks are aboveground, horizontal, open-top steel tanks with a capacity of about 5,250 gallons.
Startup	Four tanks began operation in 1979, and four began operation in 1986.	The unit began operation in 1979.	Unknown
Date of Closure	The unit is inactive, pending closure.	The unit is active.	All tanks are inactive, pending closure.
Wastes Managed	Wastes stored included (1) used oil (nonhazardous), (2) wastewater (nonhazardous), (3) tank bottoms (D007, D008, D009, and K049), and (4) tank bottoms (nonhazardous).	Wastes stored in this tank include (1) used oil (nonhazardous), (2) wastewater (nonhazardous), (3) tank bottoms (D008, D009, and K049), (4) tank bottoms (nonhazardous), and (5) used antifreeze (nonhazardous).	Hydrocarbon wastes that include (1) used oil (nonhazardous) (2) wastewater (nonhazardous), (3) tank bottoms (D008, D009, and K049), and (4) tank bottoms (nonhazardous).
Release Controls	The tanks are located on bare soil with no form of release control.	The unit is on bare soil with no form of release control.	All tanks are located on bare soil with no form of release control.
History of Documented Releases	No releases from this SWMU have been documented.	No releases have been documented.	No releases have been documented from these tanks. However, the area where two of the tanks are located is contaminated with chromium as a result of leaks from SWMU No. 7.
Remedial Action Taken	None	None	None
Release Potential	Low	Moderate to high	Low
Potential Pathway	Soil, surface water, ground water	Soil, surface water, ground water	Soil, surface water, ground water
Reasons	The tanks are inactive.	Any release from this unit has the potential of reaching soil and surface water, since the unit has no secondary containment.	The tanks are inactive.
Need for Further Action	Pursue closure of the unit.	Add diking to contain any potential releases from the unit.	Close the unit. Conduct sampling investigation to verify the source and extent of contamination surrounding the unit.

TABLE 2

## SWMU AND AOC SUMMARY

Sheet 4 of 5

	SWMU No. 10	SWMU No. 11	SWMU No. 12
Unit name	Container storage area	Waste oil tank	Chromium-contaminated soil area
Description	The container storage area is located in the southwest corner of the facility. The unit is a concrete slab measuring about 125 by 50 feet. This area was previously a tank farm associated with SWMU No. 1 and was used to store wastes.	The waste oil tank is located on the west side of the maintenance shed in the southeast end of the facility. The unit is a 100-gallon vertical, aboveground, steel tank located on pavement on 6 inch metal legs.	The chromium-contaminated soil area is about 170 by 75 feet, with a maximum depth of 2 feet. It is located in the west-central portion of the facility. One skid tank (SWMU No. 9) is located on this area. The contamination extends under the paved truck access area associated with the north blending unit (SWMU No. 3).
Startup	This unit began operation in 1987.	1989 (estimated)	TWC identified this area in July 1990.
Date of Closure	The unit is active.	The unit is active.	This unit is inactive, pending closure.
Wastes Managed	Fifty-five-gallon drums containing (1) oily dirt (nonhazardous), (2) nonhazardous spent spill absorbent, (3) nonhazardous used motor oil filters, and (4) used antifreeze (nonhazardous)	Wastes include used oil and spent Varsol (D001).	Chromium-contaminated waste tank bottoms (D007) from tanks 5A, 5B, and 5C of SWMU No. 7 were disposed of in this area.
Release Controls	The unit is paved with concrete and has 3-foot concrete walls on its north and south sides. The east and west ends have no form of release control.	The unit is located on a concrete pavement and has no other release controls.	The unit has no form of release control.
History of Documented Releases	No releases have been documented. However, soil contamination is suspected under the concrete slab and surrounding areas resulting from past operation as a tank farm.	No releases have been documented.	In July 1990, TWC identified very high concentrations of chromium in this area.
Remedial Action Taken	No site cleanup was performed before construction of the concrete slab.	Not applicable	Sampling and closure action is pending, pursuant to review and approval by TWC.
Release Potential	Low to moderate	Low	High
Potential Pathway	Soil, surface water, ground water	Soil, surface water, ground water	Soil, surface water, ground water
Reasons	There is no visible surface contamination. Any spill has the potential of reaching the exposed soils because of the lack of secondary containment on two sides.	There is no secondary containment to minimize releases.	The area of contamination is in the path of surface water drainage. Release to ground water is moderate because of the highly mobile nature of chromium.
Need for Further Action	Sample the soil underneath the concrete slab to verify previous releases. Construct diking to contain any releases.	Install secondary containment to minimize potential for releases to the environment.	Determine the extent of contamination, and initiate removal of the contaminated soil.

**TABLE 2**  
**SWMU AND AOC SUMMARY**

Sheet 5 of 5

	SWMU NO. 13	AOC No. 1	AOC No. 2
Unit name	Tank 2000	North blending storage tank area	Fuel and solvent storage area
Description	Tank 2000 is located west of the north blending storage tank area (AOC No. 1) at the northwest corner of the facility. This unit is an aboveground, vertical, steel tank with a capacity of 84,000 gallons.	This area is located west of the north blending unit (SWMU No. 3). Associated with this area are four tanks used to store blended boiler fuel materials generated by the north and south blending units.	The fuel and solvent storage area is located east of the inactive tank area (SWMU No. 7) and north of the south blending unit (SWMU No. 1). The unit consists of two 8820-gallon and two 2100-gallon vertical, aboveground steel tanks situated on bare soil.
Startup	1986	1986	Unknown
Date of Closure	The unit is active	The unit is active.	The unit is active.
Wastes Managed	Tank 2000 stores wastes that include (1) used oil (nonhazardous) (2) oil wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater (nonhazardous), (5) tank bottoms (D008, D009, and K049), and (6) tank bottoms (nonhazardous).	The four 42000-gallon tanks are used for storage of blended fuels.	No wastes are managed in this unit. The tanks are used for storage of diesel, gasoline, and Varsol™ solvent.
Release Controls	The tanks have no release controls.	The tanks have no release controls.	The unit is surrounded by a 2-foot-high soil berm.
History of Documented Releases	No releases have been documented.	No releases have been documented.	No releases have been documented. However, the vegetation within the bermed area around the unit is stressed.
Remedial Action Taken	None	None	No remedial action has been reported.
Release Potential	Low	Low	Low to moderate
Release Pathway	Soil, surface water, ground water	Soil, surface water, ground water	Soil, air
Reason for Release Potential Rating	There are no release controls. The area receives storm water runoff from the north blending unit (SWMU No. 3).	There are no release controls. The area receives storm water runoff from the north blending unit (SWMU No. 3).	Vegetation within the secondary containment area was distressed, showing evidence of a release. The potential for a release to soil is low because of the soil berm.
Need for Further Action	Build diking to prevent releases. Conduct soil sampling and analysis.	Build diking to prevent releases. Conduct soil sampling and analysis.	Conduct sampling to determine soil contamination and, if it is indicated, perform ground-water sampling.

**TABLE 3**  
**PROCESS AND STORAGE TANKS ASSOCIATED**  
**WITH THE SOUTH BLENDING UNIT (SWMU NO. 1)**

<u>TANK NO.</u>	<u>CONSTRUCTION MATERIAL</u>	<u>CAPACITY (gallons)</u>
1	Steel	8,820
2	Steel	8,820
3	Steel	8,820
4	Steel	8,820
5	Steel	8,820
6	Steel	21,000
7	Steel	16,800
8	Steel	21,000
9	Steel	16,800
10	Steel	21,000
11	Steel	16,800
12	Steel	21,000
UST	Unknown	8,820

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Notes:

Source - RCRA facility assessment report (TWC, 1991c)

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The facility has not designed a specific flow process for the tanks. Instead, the facility uses the tank(s) that have available capacity for treating the spent materials. Therefore, all of the ASTs and the UST are eventually used to (1) receive and treat the spent hydrocarbon materials, and (2) temporarily store the waste materials generated by the treatment process. For example, if tank 11 has available capacity, the spent hydrocarbon materials from off-site are discharged to this tank. After they have been discharged to this tank, the materials are allowed to separate by gravity, resulting in phase separation. After the materials are separated, the lighter-phase hydrocarbons are pumped from the tank into a storage tank that is used to hold this material until it is sold as a fuel for industrial boiler furnaces. The heavier phase materials - generally water and sludge - continue to be stored in this tank until the material can be disposed of off-site by an approved disposal facility. Because of this management process, all of the tanks associated with this unit are discussed as one unit.

#### Startup

No information concerning the initial operational dates of each of the tanks was found in the files reviewed. However, based on file information notifying TDWR of SDC's plans to relocate to its current address, it is estimated that the tanks were first used in 1979.

#### Date of Closure

All of the tanks are active.

#### Wastes Managed

The tanks in the south blending unit process different types of spent hydrocarbon materials, depending on what is purchased from the off-site generators. However, the wastes that were identified in TWC files include (1) nonhazardous used oil, (2) oily wastes (D001), (3) spent Varsol™ solvent (D001), (4) nonhazardous wastewater, (5) hazardous tank bottoms (D008, D009, and K049), and (6) nonhazardous tank bottoms. The wastes generated from the treatment process are stored in the tanks until sufficient quantities accumulate for disposal off-site at an approved disposal facility.

### Release Controls

All of the ASTs are situated on bare ground, and a 2-foot-high dike built of soil surrounds the ASTs. However, the diked area is not designed to contain a large release. Also, the UST has no secondary containment or leak detection system.

### History of Documented Releases

Several releases from this unit to the soil and surface water have been documented. In December 1982, waste oil was spread on exposed soil at this unit. According to the facility, it was placed on the soil for stabilization before a caliche pad was built in this area. In 1982, TDH and TDWR collected a soil sample and a surface water sample from this area near one of the tanks. Results of the analysis indicated the presence of lead, toxaphene, 5,5-dibutyl phosphorothrithioate, phenylphosphorothioic acid O-ethyl O-p-nitrophenyl ester, and methyl parathion. TWC required the facility to delineate and remediate the contaminated area. According to the files, the facility cooperated with TWC, but no additional information was available about the cleanup activities.

In June 1989, TWC documented a waste oil spill within the secondary containment area and a discharge of oily wastewater outside the secondary containment area. The facility initially covered the spill with fresh soil. At TWC direction, SDC took corrective action. However, details of the corrective actions were not found in the files reviewed.

In July 1990, TWC documented another release of oily waste and wastewater from this unit outside of the dike. TWC issued a Notice of Violation, instructing SDC to take corrective action in cleaning the contaminated area. It is not known whether the facility implemented any corrective action.

In April 1991, TWC conducted a solid waste compliance inspection and documented releases of wastes to the soil from tanks 8, 10, and 12. TWC required the facility to remediate the contaminated area, but there is no record of any completed remediation activities.

In June 1991, TWC conducted a VSI while performing an RFA. During the VSI, TWC personnel documented oily soil at this unit. In the RFA, TWC recommended further remedial actions for this unit, but there is no record of any completed remediation activities.

### Observations

During the VSI conducted in May 1992, PRC noted staining on exposed soil and pavement in the vicinity of the loading area and underground process vessel.

## **3.2 SWMU NO. 2 - SOUTH LOADING AREA**

### Description

The south loading area is a paved slab on the north-central side of the south blending unit (Figure 2) and is bordered on the south by a vertical plywood splash wall, from which discharge pipe connections extend (Photograph No. 1). The unit is about 70 feet by 20 feet and is surrounded by exposed soil on the south, west, and north sides. This loading facility is used to load waste hydrocarbons, used oil, wastewater, and tank bottoms onto and off trucks.

### Startup

No information was available from the file review. The best estimate for startup is 1979.

### Date of Closure

This unit is active.

### Wastes Managed

Wastes managed are the same as those managed by the south blending unit (SWMU No. 1). The wastes include (1) used oil (nonhazardous), (2) oily wastes (D001), (3) spent Varsol™ solvent (D001), (4) wastewater (nonhazardous), (5) tank bottoms (D008, D009, and K049), and (6) tank bottoms (nonhazardous).

### Release Controls

This unit has a vertical plywood splash wall, about 3 feet high, on the south side of the loading area. The loading area is paved and slightly sloped for easy truck access. There are exposed soil areas on the south, west, and east sides. There is minimal release control.

### History of Documented Releases

In April 1991, TWC conducted a solid waste compliance inspection and documented a release of oily wastes to the soil from this unit. TWC required the facility to remediate the contaminated area, but there is no record of any remediation work performed at the site.

In June 1991, TWC conducted a VSI as part of an RFA. During the VSI, TWC personnel documented oil-stained soil at this unit. In the RFA, TWC recommended further remedial actions for this unit.

### Observations

During the VSI conducted in May 1992, PRC noted stained soils in the vicinity of the unit.

## **3.3 SWMU NO. 3 - NORTH BLENDING UNIT**

### Description

The north blending unit is located in the northwest corner of SDC, and north of the north loading area (SWMU No. 4) (Figure 2). This unit occupies an area measuring about 289 by 100 feet. Associated with this unit are 12 ASTs and 1 UST. All of the ASTs are located on a concrete pad surrounded on three sides by a concrete dike that measures about 3 feet high by 1 foot thick (Photographs No. 4, 5, and 6). The UST does not have any secondary containment or leak detection system. Table 4 summarizes all of the tanks associated with this unit by tank number, construction material, and capacity.

The facility has not designed a specific flow process for the tanks. Instead, the facility uses the tank(s) that have available capacity for treating the spent materials. Therefore, all of the ASTs and the UST are eventually used to (1) receive and treat the spent hydrocarbon materials, and (2) temporarily store the waste materials generated by the treatment process. For example, if tank 401 has available capacity, the spent hydrocarbon materials from off-site are discharged to this tank. After they have been discharged to this tank, the materials are allowed to separate by gravity, resulting in phase separation. After the materials have been separated, the lighter phase hydrocarbons are pumped from the tank into a storage tank used to hold this material until it is sold as a fuel for industrial boiler furnaces. The heavier phase

**TABLE 4**  
**PROCESS AND STORAGE TANKS ASSOCIATED**  
**WITH THE NORTH BLENDING UNIT (SWMU NO. 3)**

<u>TANK NO.</u>	<u>CONSTRUCTION MATERIAL</u>	<u>CAPACITY (gallons)</u>
301	Steel	16,800
401	Steel	16,800
402	Steel	16,800
403	Steel	16,800
404	Steel	16,800
405	Steel	16,800
801	Steel	16,800
802	Steel	35,700
803	Steel	35,700
804	Steel	35,700
805	Steel	35,700
806	Steel	35,700
UST	Unknown	8,820

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Note:

Source - RCRA facility assessment report (TWC, 1991c)

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materials - generally water and sludge - continue to be stored in this tank until the material can be disposed of off-site by an approved disposal facility. Because of this management process, all of the tanks associated with this unit are discussed as one unit.

#### **Date of Startup**

No information was found in the file review. Startup is estimated to have occurred in 1986.

#### **Date of Closure**

All of the tanks are active.

#### **Wastes Managed**

The tanks in the north blending unit process different types of spent hydrocarbon materials, depending on what is purchased from the off-site generators. However, some of the wastes identified in the TWC files include (1) nonhazardous used oil, (2) oil wastes (D001), (3) spent Varsol<sup>TM</sup> solvent (D001), (4) nonhazardous wastewater, (5) hazardous tank bottoms (D008, D009, and K049), and (6) nonhazardous tank bottoms. The wastes generated from the treatment process are stored in the tanks until sufficient quantities accumulate for disposal off-site at an approved disposal facility.

#### **Release Controls**

All of the ASTs are located on a concrete pad and are surrounded on three sides by a concrete dike that measures about 3 feet high and 1 foot thick. The concrete dike is located along the east, north, and south sides of the unit. The west end of the unit is open to the north blending storage area (AOC No. 1), which is located on bare soil. The direction of surface water drainage is to the west, which allows the storm water collected within this unit to flow onto the soil at AOC No. 1. The UST has no secondary containment or leak detection system associated with it.

### History of Documented Releases

In August 1991, TWC conducted a VSI as part of an RFA that it was performing. According to the RFA, TWC noted oil-stained soil in the area of the UST.

### Observations

During the VSI, PRC observed soil stained with waste oil around the UST and in several areas on the concrete pad around the ASTs. No active releases were observed.

## **3.4S SWMU NO. 4 - NORTH LOADING AREA**

### Description

The north loading area is a paved area on the south-central side of the north blending unit (SWMU No. 3) (Figure 2) and is bordered on the north by a 2-foot sloped concrete splash wall on which discharge pipe connections are mounted (Photograph No. 6). At the base of the splash wall, there is a small spill collection sump that drains through a pipe to the north process unit UST. The loading area is surrounded by exposed soil on the south side, on the north side, and east and west of the splash-wall. This loading facility is used to load waste boiler fuel, waste hydrocarbons, used oil, wastewater, and tank bottoms onto and off of trucks.

### Startup

No information was available from the file review. Startup is estimated as occurring in 1985 or 1986.

### Date of Closure

This unit is active.

### Waste Managed

Wastes managed by this unit include (1) nonhazardous used oil, (2) oily wastes (D001), (3) spent Varsol™ solvent (D001), (4) nonhazardous wastewater, (5) tank bottoms (D008, D009, and K049), (6) nonhazardous tank bottoms, and (7) blended waste fuel. This unit is used only during the transferring of (1) spent hydrocarbons coming into the facility, and (2) blended fuels being shipped to a facility that has purchased this for fuel.

### Release Controls

This unit has a 2-foot concrete splash wall on the north side of the loading area. A small rectangular sump is centrally located at the base of the splash wall. The sump drains into the north process unit UST. Exposed soil areas are on the north and south sides of the unit, and east and west of the splash wall. There is minimal release control.

### History of Documented Releases

In April 1991, TWC documented oil waste on exposed soil around the loading unit. In August 1991, TWC documented oil-stained soils around the loading unit.

### Observations

The exposed soil around the loading area was stained with oil.

## **3.5 SWMU NO. 5 - INACTIVE FRAC TANKS**

### Description

Inactive frac tanks 1 through 4 are located in two different areas at the facility. These tanks are being addressed as one unit because all of the tanks have the same construction, manage the same types of waste, and are inactive. Also, none has been documented as having a release to the environment. These frac tanks are commonly used in the oil industry as portable tanks at various locations, and are used mainly as storage tanks for various liquid materials. All of the tanks are located on bare soils, and each has a capacity of about 21,000 gallons (Photographs No. 7, 10, and 12).

Frac tank 1 is located south of the north blending unit (SWMU No. 3) and north of the inactive tanks (SWMU No. 7) (Figure 2). Frac tanks 2, 3, and 4 are located north of the container storage area (SWMU No. 10) and southwest of the inactive tanks (Figure 2).

#### **Startup**

No information was available from the file review.

#### **Date of Closure**

This unit is inactive, pending closure.

#### **Wastes Managed**

This unit has been used as a process vessel for waste hydrocarbons with high solids and water content. The wastes stored in these units included (1) nonhazardous used oil, (2) nonhazardous wastewater, (3) hazardous tank bottoms (D008, D009, and K049), and (4) nonhazardous tank bottoms. Wastes from this unit were stored in the on-site tanks until sufficient quantities accumulated for disposal off-site at an approved disposal facility.

#### **Release Controls**

This unit is on exposed soil with no form of release control.

#### **History of Documented Releases**

No releases from this unit have been documented.

#### **Observations**

The tanks may still contain waste from previous waste storage activities. PRC did not observe any evidence of releases.

### 3.6 SWMU NO. 6 - FRAC TANK 6

#### Description

Frac tank 6 is located on the east side of the south blending unit (SWMU No. 1) and sits on bare soil. It is a rectangular steel tank used in the oil field industry. The tank has a capacity of about 21,000 gallons (Photograph No. 1).

#### Startup

No information was available from the file review.

#### Date of Closure

This unit is active.

#### Waste Managed

This unit has been used as a process vessel for waste hydrocarbons with high solids and water content. The wastes stored in this unit included (1) nonhazardous used oil, (2) nonhazardous wastewater, (3) hazardous tank bottoms (D008, D009, and K049), and (4) nonhazardous tank bottoms. Wastes from this unit were stored in the on-site tanks until sufficient quantities accumulated for disposal off-site at an approved disposal facility.

#### Release Controls

This unit is on bare soil with no form of release control.

#### History of Documented Releases

In August 1991, Frac tank 6 was reported to be releasing waste oil during a TWC VSI. This release was attributed to overfilling and a leaking valve.



### **Observations**

PRC observed stained soil around the unit during the VSI.

## **3.7 SWMU NO. 7 - INACTIVE TANK AREA**

### **Description**

The inactive tank area is located in the west-central portion of the SDC facility (Figure 2). Specifically, this area is between the south and north loading areas (SWMU Nos 2. and 4). Associated with this unit are eight steel tanks, some vertical and some horizontal. These tanks are addressed as one unit, because all have (1) similar construction, (2) similar associated wastes, and (3) are inactive and pending closure. Table 5 summarizes the associated tanks by tank number, construction material, capacity, and startup (Photographs No. 7, 8, and 9).

### **Startup**

The operational dates for each of the tanks are listed in Table 4 for reference.

### **Date of Closure**

All of the tanks in this unit are inactive, pending closure.

### **Waste Managed**

These tanks have been used as process vessels for waste hydrocarbons with high solids and water content. The wastes stored in these tanks include (1) nonhazardous used oil, (2) nonhazardous wastewater, (3) hazardous tank bottoms (D007, D008, D009, and K049), and (4) nonhazardous tank bottoms.

### **Release Controls**

This unit is on exposed soil with no form of release control.

### **History of Documented Releases**

No releases from this unit have been documented. However, tanks 5A, 5B, and 5C are suspected sources of chromium sludge in the chromium-contaminated soil area (SWMU No. 12).

### **Observations**

PRC did not observe any evidence of a release during the VSI.

## **3.8 SWMU NO. 8 - TANK 16**

### **Description**

Tank 16 is located next to frac tank 1 (SWMU No. 5), in the open area in the center of the west end of the SDC Facility (Figure 2). The unit is on exposed soil and is a horizontal, aboveground, cylindrical steel tank with a capacity of 10,500 gallons (Photograph No. 9).

### **Startup**

This unit began operation in 1979.

### **Date of Closure**

This unit is active.

### **Wastes Managed**

This unit has been used as a process vessel for waste hydrocarbons with high solids and water content but is currently used to store used antifreeze. The wastes stored in this facility include (1) nonhazardous used oil, (2) nonhazardous wastewater, (3) hazardous tank bottoms (D008, D009, and K049), (4) nonhazardous tank bottoms, and (5) nonhazardous used antifreeze. Wastes from this unit are stored in the on-site tanks until sufficient quantities accumulate for disposal off-site at an approved disposal or recovery facility.

**TABLE 5****PROCESS AND STORAGE TANKS ASSOCIATED  
WITH THE INACTIVE TANK AREA (SWMU NO. 7)**

<b>TANK NO.</b>	<b>CONSTRUCTION MATERIAL</b>	<b>CAPACITY (gallons)</b>	<b>OPERATING SINCE</b>
15	Steel	10,500	1979
17	Steel	10,500	1979
18	Steel	8,820	1979
19	Steel	8,820	1979
5A	Steel	21,000	1986
5B	Steel	21,000	1986
5C	Steel	21,000	1986
5D	Steel	21,000	1986

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Note:

Source - RCRA facility assessment report (TWC, 1991c)

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### **Release Controls**

This unit is on exposed soil with no form of release control.

### **History of Documented Releases**

No releases from this unit have been documented.

### **Observations**

PRC did not observe any evidence of a release during the VSI.

## **3.9 SWMU NO. 9 - SKID TANKS**

### **Description**

The skid tanks are located in the west-central portion of the SDC facility (Figure 2). Specifically, these skid tanks are located northwest of the inactive tanks (SWMU No. 7) and within the chromium-contaminated soil area (SWMU No. 12) (Figure 2). Two skid tanks are associated with this unit, identified as skid tanks no. 2 and 3. These tanks have been identified as one unit, because both the tanks (1) have similar construction, (2) are located in the same general area, (3) were used to manage the same types of waste, and (4) have similar historical usage. The skid tanks are (1) aboveground, horizontal tanks, (2) have open tops, and (3) are built of steel (Photographs No. 8, 10, and 11). Skid tank no. 1, which was located within an area that has been identified as being contaminated with chromium (SWMU No. 12), was removed by the facility. No records showing the date of removal of this skid tank was available in the files. Part of skid tank 2 is located within the contaminated area. Skid tank 3 is located directly south of skid tank 2, outside of the area identified as being contaminated with chromium (Figure 2). The capacity of skid tank 2 is not known. The capacity of skid tank 3 is about 5,250 gallons.

### **Startup**

No information was available from the file review.

#### Date of Closure

All of the tanks are inactive, pending closure.

#### Waste Managed

These tanks were used as process vessels for waste hydrocarbons with high solids and water content. The wastes stored in these tanks included (1) nonhazardous used oil, (2) nonhazardous wastewater, (3) hazardous tank bottoms (D008, D009, and K049), and (4) nonhazardous tank bottoms. Wastes from these tanks were stored in the tanks until sufficient quantities had accumulated for disposal off-site at an approved disposal facility.

#### Release Controls

All of the tanks are sitting on bare soil with no form of release control.

#### History of Documented Releases

No releases have been documented from these tanks. However, the area where skid tank 2 is located has been documented as being contaminated with chromium. The chromium contamination is suspected to originate from bottoms in tanks 5A, 5B, and 5C (SWMU No. 7).

#### Observations

PRC did not observe any evidence of a release during the VSI.

### **3.10 SWMU NO. 10 - CONTAINER STORAGE AREA**

#### Description

The container storage area is located in the southwest corner of the SDC facility, next to the west end of the south blending unit (SWMU No. 1) (Figure 2). The unit is a concrete slab measuring about 125 by 50 feet, is enclosed on the north and south sides by a 3-foot-high concrete wall, and is used as a temporary waste storage unit. Sealed 55-gallon drums of



nonhazardous wastes are stored at this unit pending accumulation of sufficient quantities for off-site disposal at an approved facility (Photographs No. 12 and 13).

#### **Startup**

This unit began operation in 1987.

#### **Date of Closure**

This unit is active.

#### **Wastes Managed**

The wastes stored in this unit include (1) oily dirt (nonhazardous), (2) nonhazardous spent spill absorbent, (3) nonhazardous used motor oil filters, and (4) nonhazardous used antifreeze. Wastes from this unit are stored in the 55-gallon drums until sufficient quantities accumulate for disposal off-site at an approved disposal or recycling facility.

#### **Release Controls**

This unit is paved with concrete, with 3-foot concrete walls on the north and south sides of the unit. The east and west ends of the unit have no secondary containment structure. There is little or no release control.

#### **History of Documented Releases**

No releases from this unit have been documented.

#### **Observation**

The container storage area showed no evidence of current releases but was identified as a site of historical releases. The concrete slab is situated on the former site of the south blending area. Releases had previously occurred in this area, and no closure was performed before the construction of this slab.

### **3.11 SWMU NO. 11 - WASTE OIL TANK**

#### **Description**

The waste oil tank is located on the west side of the maintenance shed in the southeast end of the SDC facility (Figure 2). The unit is a vertical, aboveground steel tank situated on pavement on 6-inch metal legs, and has a capacity of 100 gallons. A photograph of this SWMU was not taken during the VSI.

#### **Startup**

No information was available from the file review. The estimated startup of this unit is 1989.

#### **Date of Closure**

This unit is active.

#### **Wastes Managed**

Wastes stored in the tank include (1) nonhazardous used oil, and (2) spent Varsol™ (D001). Wastes from this unit are stored until sufficient quantities accumulate for disposal off-site at an approved disposal or recycling facility.

#### **Release Controls**

This unit is located on a concrete pavement and has no other form of release controls.

#### **History of Documented Releases**

No releases from this unit have been documented.

### Observations

PRC did not observe any evidence of a release during the VSI.

### **3.12 SWMU NO. 12 - CHROMIUM-CONTAMINATED SOIL AREA**

#### Description

The chromium-contaminated soil area is located in the west-central portion of the SDC facility, south of the north blending storage tanks (AOC No. 1) and northwest of the inactive tank area (SWMU No. 7) (Figure 2). Skid tank 2 (SWMU No. 9) is located on part of this area. The dimensions of the contaminated area are unknown but are estimated to measure about 170 by 75 feet, with a maximum depth of 2 feet based on visual appearance and discussions with the facility representative (Photograph Nos. 9, 10, and 14). The area of contamination is also believed to extend under the paved truck access area associated with the north blending unit (SWMU No. 3).

#### Startup

TWC identified this area of contamination in July 1990.

#### Date of Closure

No facility operations are currently being conducted in this area. However, TWC notified the facility with a violation and required it to conduct an investigation to characterize the extent of contamination and to remediate the area. The sampling and closure action is currently pending, pursuant to review and approval by TWC.

#### Wastes Managed

The facility had disposed of chromium-contaminated wastes on the soil in this area. The waste is suspected to have originated from the tank bottoms that were stored in tanks 5A, 5B, and 5C of the inactive tank area (SWMU No. 7).

### Release Controls

No release controls are associated with this unit.

### History of Documented Releases

In July 1990, TWC personnel identified this area as being contaminated with high concentrations of chromium. TWC and SDC personnel collected and analyzed the samples. The results indicated total chromium levels of 238,000 ppm. The chromium contamination was determined to have originated from the inactive tank area (SWMU No. 7) (TDH, 1990; Core, 1990; Volz, 1990).

### Observations

The chromium-contaminated soil area is situated in the direct path of surface drainage from the SDC facility towards Vollo Creek. Green colored wastes containing elevated levels of chromium were observed on the south side of the north blending unit (SWMU No. 3)

## **3.13 SWMU NO. 13 - TANK 2000**

### Description

Tank 2000 is located at the west end of the north blending storage tank area (AOC No. 1) near the northwest corner of the facility. The unit is an aboveground, vertical, steel tank with a capacity of 84,000 gallons. It is located on bare soil surrounded by a 10-inch-high steel apron (Photograph Nos. 15, 16, and 17).

### Startup

The unit began operation in 1986.

### Date of Closure

This unit is active.

### **Wastes Managed**

Wastes stored in the tank include (1) nonhazardous used oil, and (2) spent Varsol™ (D001), oil wastes (D001), (4) nonhazardous wastewater, (5) tank bottoms (D008, D009, and K049), and nonhazardous tank bottoms. Wastes from this unit are stored until sufficient quantities accumulate for disposal off-site at an approved disposal facility.

### **Release Controls**

This unit is located on bare soil and has no form of release controls.

### **History of Documented Releases**

No releases from this unit have been documented.

### **Observations**

PRC observed stained soil around the tank during the VSI. The tank area is in the path of storm water runoff from the north blending unit (SWMU No. 3).

## **4.0 AREAS OF CONCERN**

During the PA and VSI, PRC personnel identified two AOCs. The following is a discussion of these areas. Table 2 summarizes AOC information.

### **4.1 AOC NO. 1 - NORTH BLENDING STORAGE TANK AREA**

The north blending storage tank area is located between the north blending unit (SWMU No. 3) and tank 2000 (SWMU No. 13) (Figure 2). Associated with this area are four tanks used to store blended boiler fuel materials generated by the north and south blending units (SWMUs No. 1 and 3). The tanks in this unit are numbered 1001, 1002, 1003, and 1004. Each of these tanks is (1) situated on bare soils, (2) built of steel, (3) vertical, (4) aboveground, and (5) surrounded with a 10-inch-high steel apron (Photographs Nos. 16 and 17). Each tank has a capacity of 42,000 gallons.



All of the tanks were placed into operation in 1986 and are active. These tanks do not manage waste material but are used to store the blended fuels that are to be sold to facilities that will use the material as industrial boiler fuels. No release controls are associated with the tanks. Also, this area receives the storm water runoff from the north blending unit (SWMU No. 3), which is located east of this unit. No releases have been documented from this unit. However, PRC observed stained soils around the tanks during the VSI.

#### **4.2 AOC NO. 2 - FUEL AND SOLVENT STORAGE AREA**

This unit is located east of the inactive tank area (SWMU No. 7) and north of the south blending unit (SWMU No. 1) (Figure 2). This area is identified as an AOC because PRC observed stressed vegetation during the VSI (Photograph No. 18). Associated with this unit are four aboveground steel tanks - 2F, 3F, 4F, and 5F - used to store diesel, gasoline, and Varsol™ solvent. This unit is surrounded by a soil berm, which is about 2 feet high. All of the tanks are situated on bare soil. Tanks 2F and 3F have a capacity of 8,820 gallons each and are used to store gasoline and diesel, respectively. Tanks 4F and 5F have a capacity of 2,100 gallons each and are used to store Varsol™ solvent. Tank 1F was once located in this area but was recently moved to a paved area and is now used to store a specialty chemical product, CalSite-1. There have been no documented releases from this unit. However, during the VSI, stressed vegetation was noted within a secondary containment area where fuels and solvent are stored (Photograph No. 22). Tank 1F, previously identified as a gasoline or diesel storage vessel, had recently been relocated for use as a specialty chemical storage tank in a new tank area. No stain was evident to assist in identifying the type of release, but all materials stored within this area, including the solvent Varsol™, are hydrocarbon-based.

### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

The PA/VSI identified 12 SWMUs and 2 AOCs at the SDC facility. Following are PRC's conclusions and recommendations for each SWMU and AOC.

The following site inspection and removal recommendations are consistent with the TWC enforcement action and facility closure requirements that are a condition for operating under a new Part B permit. The fuel and solvent storage area (AOC No. 2) is a newly identified potential release site.

For the south blending unit (SWMU No. 1), PRC recommends a site investigation (SI) to include the south loading area and frac tank 6 (SWMUs No. 2 and 6). These facilities and the storage tank have a documented history of waste hydrocarbon releases of unknown quantities. The purpose of the investigation would be to determine the presence of any hazardous constituents that might pose a threat to human health and the environment, and determine the potential existence of subsurface soil and ground-water contamination. The potential for a release to surface water and on-site soils is moderate to high because of a limited secondary containment structure that might inhibit minor spills. The potential for a release to ground water is moderate because of the history of the waste releases and moderate permeability of clay substrata. The potential for a release to air is considered moderate because of the volatile nature of gasoline constituents in wastewater collected from UST closures from other facilities and delivered to SDC in unknown quantities.

PRC recommends an SI for the north blending storage tank area (AOC No. 1), tank 2000 (SWMU No. 13), and the north loading area (SWMU No. 4). These facilities have a documented history of chronic releases of unknown quantities of waste hydrocarbons. The purpose of the investigation would be to determine the presence of any hazardous constituents in the subsurface soil and ground water. The potential for a release to surface water and on-site soils is moderate to high because of a lack of secondary containment and its proximity to the SDC facility surface water drainage pathway. The potential for a release to surface water and on-site soils is moderate to high because of a lack secondary containment and its proximity to the SDC facility surface water drainage pathway. The potential for release to ground water is moderate because of the history of waste releases and a partially paved process area. The potential for a release to air is low to moderate because of the volatile nature of gasoline constituents in wastewater collected from UST closures from other facilities and delivered to SDC in unknown quantities.

PRC recommends an SI for the container storage area (SWMU No. 10), which should address possible soil contamination under the concrete slab storage area and surrounding exposed soil areas. This area was previously a tank farm associated with the south blending unit and, reportedly, was used to store wastes. Although no evidence of a release was documented during the VSI, past operations reportedly resulted in some releases. No known site cleanup was performed before construction of the concrete slab. The potential for a release to surface water is low because of a lack of contact between surface runoff and any surface contamination. The potential for a release to on-site soils, ground water, and air is unknown.

PRC recommends closure of the remaining storage tanks situated at various locations at the west end of the SDC facility in accordance with RCRA regulations. These tanks include inactive frac tanks 2, 3, and 4 (SWMU No. 5), and eight inactive tanks (SWMU No. 7). Tank 5A, 5B, 5C, and 5D in the inactive tank area are suspected sources of the chromium sludge. These units are inactive, pending closure, and the potential for a release of hazardous constituents to surface water, soils, ground water, and air is unknown.

An SI should also include investigation of soils in the vicinity of inactive frac tank 1 (SWMU No. 5), tank 16 (SWMU No. 8), and skid tanks 2 and 3 (SWMU No. 9). The investigation should address subsoil contamination and possible ground-water contamination.

PRC recommends an SI and removal action for the chromium-contaminated soil area (SWMU No. 12). The potential for a release of hazardous constituents to surface water and on-site soils is high because there is visible evidence of surface contamination. The potential for a release to ground water is moderate because of the highly mobile nature of the chromium and the moderate permeability of clay substrata beneath the facility. The potential for a release to air is low. Primary receptors of target releases from this site are on-site employees, through direct contact at this uncontrolled site. Secondary targets are wetlands affected by surface ground-water flow and surface runoff to Vollo Creek and subsequently, Oso Creek. An SI would determine the extent of potential waste releases and the extent to which the waste constituents might have migrated. SDC is currently under a TWC corrective action order for the chromium-contaminated site and submitted an investigation plan to the TWC in May 1991 for approval. The investigation plan was not available for review. No action has yet been taken.

PRC recommends an SI for the fuel and solvent storage area (AOC No. 2) to determine the presence of soil contamination in the surrounding area and in the ground water. Evidence of a release was visible from distressed vegetation within the secondary containment area. The release appears to have been contained within the enclosure, but the nature and quantity of the material released are unknown. The potential for a release to surface water and on-site soils is low because of the secondary containment structure preventing migration from the area. However, the potential for a release to soils within the bermed area is moderate to high. The potential for a release to ground water is moderate because the unit is not lined. The potential for a release to air is unknown.

No further action is required for skid tank 1, frac tank 5, and tanks 20 and 21. These tanks have been removed from the facility and no releases from these units have been documented.

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**APPENDIX A**  
**VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS**

## VISUAL SITE INSPECTION SUMMARY

SDC Services, Inc.  
7500 Greenwood Drive, Corpus Christi, TX 78427  
TXD03923361

Date: May 29, 1992

Facility Representatives: Tim Chaney, Director, Environmental Services

Inspection Team: Frank Robinson, PRC Environmental Management, Inc.  
Bill Gagnon, PRC Environmental Management, Inc.

Photographer: Bill Gagnon

Weather Conditions: Cloudy, wind from the northeast at 10 mph, temperature about 70°F

Summary of Activities: The visual site inspection (VSI) began at 9:30 a.m. CDT with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. Mr. Chaney provided a detailed description of SDC's past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question-and-answer basis. Mr. Chaney reviewed SDC's documents with the inspection team and promised to mail copies of some requested property information.

Starting at 11:20 a.m., Mr. Chaney gave the inspection team a tour of the facility. The tour included all facility structures and process, and solid waste management areas, with Mr. Chaney explaining the general operation of the process and storage areas and indicating areas of past releases. The inspection team photographed areas related to solid waste management and areas of concern.

The tour concluded at 1:00 p.m., after which the inspection team held an exit meeting with Mr. Chaney. Mr. Chaney clarified certain information and promised a prompt delivery of requested property documents. Mr. Chaney was extremely cooperative and helpful. The VSI was completed at 1:20 p.m.





Photograph No. 1

Date: 05/29/92

Orientation: North

Location: SWMU No.1

Description: From paved area in facility center, looking at north side of SWMU No. 2; note the plywood splash wall and hydrocarbon stains; the brown tank to the left is SWMU No. 6.



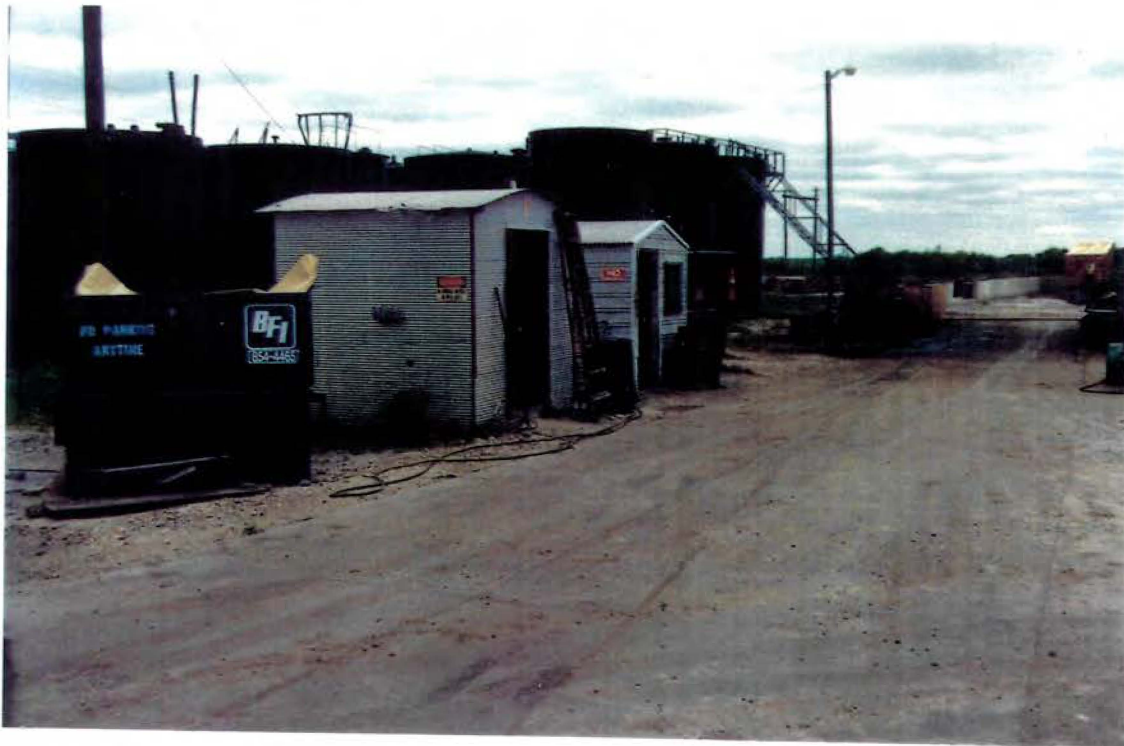
Photograph No. 2

Date: 05/29/92

Orientation: West

Location: SWMU No.1

Description: View of rectangular opening of the UST and miscellaneous hoses in SWMU No. 1; note bare soil and hydrocarbon stain



Photograph No. 3

Date: 05/29/92

Orientation: West

Location: SWMU No. 1

Description: View of SWMU No. 1 from the paved truck access, with the 12 storage tanks in the background, and a laboratory and storage shed in the foreground



Photograph No. 4

Date: 05/29/92

Orientation: Northwest

Location: SWMU No. 3

Description: East side of SWMU No. 3 looking down center of vertical tanks; note the concrete pad in process area, and oil stains





Photograph No. 5

Date: 05\29\92

Orientation: South

Location: SWMU No. 3

Description: North side of SWMU No. 3 showing north row of process tanks, exposed soil at the west end, the retaining wall, and the paved truck access



Photograph No. 6

Date: 05\29\92

Orientation: Southwest

Location: SWMU No. 4

Description: Splash wall at SWMU No. 4; note exposed soil, hydrocarbon stains, and the rectangular covered opening of the UST in SWMU No. 3



Photograph No. 7

Date: 05\29\92

Orientation: East

Location: Center of west end of SDC facility

Description: This panoramic view is east across paved area in facility center, with frac tank 1 (SWMU No. 5) in background, and tanks 5A, 5B, 5C, and 5D (SWMU No. 7) in the foreground



Photograph No. 8

Date: 05\29\92

Orientation: Southwest

Location: Center of west end of SDC facility

Description: View is northwest toward Vollo Creek with tank 19 (SWMU No. 7) in foreground and skid tank 3 (SWMU No. 9) to the right





Photograph No. 9

Date: 05/29/92

Orientation: Southeast

Location: SWMU No. 12

Description: View down the center of SDC facility across SWMU No. 12 toward southeast; Tank 16 (SWMU No. 8) is the horizontal tank on the left; the silver vertical tanks are part of SWMU No. 7. Skid tanks 2 and 3 (SWMU No. 9) are seen on the right side.



Photograph No. 10

Date: 05/29/92

Orientation: Southwest

Location: SWMU No. 12

Description: Chromium-contaminated area in the center of west end of the facility; portable frac tank 1 (SWMU No. 5) is on the left side, and skid tanks 2 and 3 (SWMU No. 9) are in the background.



Photograph No. 11

Date: 05/29/92

Orientation: North

Location: Center of west end of SDC facility

Description: View is north across skid tanks 2 and 3 (SWMU No. 9) toward the north blending unit (SWMU No. 3), and tank storage area



Photograph No. 12

Date: 05/29/92

Orientation: East

Location: SWMU No. 10

Description: Sealed 55-gallon drums of nonhazardous waste at SWMU No. 10; frac tank 4 (SWMU No. 5) is to the left, and CalSite-1 silver tank with stairway is in background.





Photograph No. 13

Date: 05\29\92

Orientation: South

Location: Center west end of SDC facility

Description: View is to the south across the container storage area (SWMU No.10), with south blending unit (SWMU No. 1) to the left



Photograph No. 14

Date: 05\29\92

Orientation: Southeast

Location: SWMU No. 12

Description: Green waste containing elevated levels of chromium, taken from the edge of pavement of south side of the north blending unit





Photograph No. 15 Date: 05\29\92  
 Orientation: Southeast Location: SWMU No. 13  
 Description: Exposed soil at the west end of SWMU No. 13, with standing rainwater adjacent to Tank 2000; skid tank 2 is in the immediate background.



Photograph No. 16 Date: 05\29\92  
 Orientation: Southeast Location: AOC No. 1  
 Description: View of the exposed soil at the west end of AOC No. 1 with tank 2000 (SWMU No. 13) in foreground; note oil spills around the tanks





Photograph No. 17

Date: 05/29/92

Orientation: Southwest

Location: AOC No. 1

Description: Southwest corner of the AOC No.1; a tank truck is unloading at the north loading area (SWMU No. 4).



Photograph No. 18

Date: 05/29/92

Orientation: Northeast

Location: AOC No. 2

Description: View of the stressed vegetation in the containment area surrounding AOC No. 2.

**APPENDIX B**  
**VISUAL SITE INSPECTION FIELD NOTES**

## INDEX

Property of \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

1) Book I.D. Number AL-Ø13

2) Total Numbered Pages 157

3) Date issued 05/27/92

4) Name of Person Issued to F. ROBINSON

5) Date Returned to Document Control \_\_\_\_\_

6) Permanent Storage Location in DCR \_\_\_\_\_

This Book is manufactured of a High Grade  
50% Rag Paper having a Water Resisting Surface,  
and is sewed with Nylon Waterproof Thread.



1 Corpus Christi Area Nueces County, Tx.

May 28, 1992

10:37 Frank Robinson arrived in Corpus Christi area to perform a VSI portion of a preliminary assessment on the SDC Services, Inc. facility. Activities on this day were to focus on collection of related information from local sources.

10:50 Departed Corpus Christi to visit Soil Conservation Office in Robstown at the Nueces County Center. Mr. John Freeman was expecting my arrival and was making available the Nueces County Soil Survey book along with flood plain maps. Mr. Freeman was away on business but had left the soil survey book with the Nueces County library. Copies were made of applicable geologic data. Returned to Corpus Christi to check into hotel and make telephone calls to other information sources.

12:50 Arrived at hotel and began local calls  
Frank Robinson 5/28/92

Corpus Christi Area Nueces County, Tx. 2

to information sources.

13:20 US Fish and Wildlife - Mariellene Vega  
(512) 888-3346

13:30 City of Corpus, Public Utilities - water  
After a series of 4 calls the receptionist refers me to Jim Riley, a water distribution supervisor. (512) 857-1888

13:40 City of Corpus, Public Utilities - water  
Jim Riley (512) 547-2122. Asked about groundwater use in vicinity of SDC suggests I contact Valerie Gray @ 857-1872 or Mike Varga @ 857-1864.

13:55 City of Corpus, Public Utilities - water  
(512) 857-1864  
Mike Varga was available. Mike indicated that all the water supply of Corpus is surface water and that the area near the SDC facility receives city water. He allowed that there may be a few homes in that area that might possibly have

Frank Robinson 5/28/92

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Corpus Christi Area Nueces County, Tx.

groundwater wells. The public utilities has no information on any water well use. I requested information on area aquifers, Mike invited me to his office and promised to ask his engineers for any information. I accepted for later this afternoon.

1415 U.S. Fish and Wildlife - Marcellane Vega (512) 888-3346. We discussed my need for information on sensitive environments in the area of the SDC facility and lower river along the Oso River. She promised to prepare a packet of information for me that I will pickup tomorrow. Their office is on the Texas A&M campus on Ward Island.

1425 Soil Conservation Office, Robstown, Tx - John Freeman, (512) 767-5228 (Library number) John was in and was willing to make his flood plain maps available tomorrow. I will meet

Frank Robinson 5/28/72

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Corpus Christi Area

Nueces County, Tx.

him at his office in Robstown at 7:30 in the morning. In response to my request for information on flooding effects of hurricanes, he referred me to James Dodson of the City of Corpus. He has been heavily involved in flood planning.

1530 Texas Water Commission (TWC)

Russell Lewis (512) 851-8484. Russel was out of the office. This call was a courtesy call that I had promised to make when I had informed Buddy Stanley of PAC's plans to perform a vst at the SDC facility and invited the TWC to attend. Buddy had declined at the time but asked that we call when we came to Corpus. I asked if they had groundwater aquifer information. Nobody was available in that area today.

I promised to call Russell tomorrow.

1540 City of Corpus, Office of Emergency Response - James Dodson (512) 880-3680

Frank Robinson 5/28/72



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Corpus Christi AreaNueces County, Tx.

James was not available today. I will call again on Monday.

15:52 NOAA - National Weather Service -

Mark Lenz, (512) 284-0959 I asked for some weather information I lacked. Prevailing winds are from the <sup>South-</sup>South-east and average 12.0 mph. Maximum average wind speed is 14.3 mph in April from the Southeast. Mark did not have evaporation data and released me to the NOAA Forecast office in

San Antonio. at (512) 826-4679, John Patten

16:00 I began the offsite reconnaissance by visiting the areas surrounding the SOC Services site to document population information not on the USGS maps.

Frank Robinson

5/28/92

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SDC Services, Inc.Nueces County, Tx.

Photograph Table

Roll Number 1, 36 photographs available		
Number	Time	Description
1	11:30	View is from E. side of N fuel blending facility looking down center of tanks looking west.
2	11:32	Photo from NE corner of N fuel blending facility showing north row of tanks, showing retaining wall, unpaved area <del>used</del> for tanks at west end and paved truck area.
3	11:40	Taken at NW end of N. Fuel Blending facility and looking east
4	11:41	View from edge of pavement at NW corner of N. Fuel Blending facility looking south
5	11:45	Photo looking west towards Volvo Creek from N Blending Fuel facility
6	12:00	Photo of suspected Chrome contamination looking down center of facility to the East.
7	12:02	SW corner of N fuel Blending concrete slab
8	12:04	SW corner of <sup>N</sup> blending facility looking towards loading area. East along the edge of pavement

Frank P. Robinson 5/29/92



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SDC Services, Inc.

Nueces County, Tx.

## Photograph Table

9	12:10	tank at N. Fuel Blending Facility. Photo of visible part of underground of paved area S of N Blending facility - looking west.
10	12:12	view of Chrome sludge AOC from edge
11	12:15	Photo taken from middle of SDC facility unpaved area looking East at 4 inactive tank vessels not identified with any process looking East down slab, towards facility west end of concrete slab (temp class 1 storage) looking Southeast across SDC unused property
12	12:25	view from SW corner of SDC property looking west @ Tank 19 with Valve deck in background
14	12:35	photo from middle slab - at west end and looking North towards N fuel Blending facility
15	"	photo from middle slab - at west end of SDC & <del>west</del> ENE towards NE corner of facility.
16	"	photo from middle slab - at west end of SDC & looking towards East - front entrance of SDC facility.
17	"	photo from middle slab - at west end of SDC & looking looking SSE @ S Fuel Blending facility.
18	"	photo from middle slab at west end of SDC & Fuel Blending facility.
19	12:44	Taken from center Slab looking S at S view of access opening to Underground Tank
20	12:45	Taken at S Fuel Blending Facility with at S Fuel Blending facility.
21	12:51	Taken from middle of plant looking SW area. Tanks 2E-SF. SW corner looking NE.
22	12:56	Photo of central fuel/solvent storage North along Greenwood Road.
23	13:05	Photo from SE entrance of SDC looking towards back of SDC facility.
24	"	Photo from SE entrance looking WNW oil field office, mobile home & maintenance shed.
25	"	Photo from SE entrance looking west at
26	"	photo from SE entrance looking S along Greenwood.
27	13:10	Municipal dump - ENE Photo from center of SDC looking East to

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SDC Services, Inc.

Nueces County, Tx.

0740: Arrived in Robstown, Texas (west of Corpus Christi) to meet with John Freeman of the Soil Conservation Service. John was able to provide me with a copy of a flood plain map of the SDC Services, Inc. area.

We also discussed sources of information on area groundwater and who might be utilizing it for personal consumption. John recommended the Texas Water Development Board or some local well drillers who have done almost all local groundwater wells.

Morton Waterwell - Robstown 512-387-2912

Young Waterwell - Robstown 387-512-3922

0840: Picked up Bill Gannon of PRC's Houston office at the Corpus Christi airport. Bill and I, (Frank Robinson) reviewed my site study plan, SDC Services

Frank R. Robinson 5/21/92



SDC Services, Inc.      Nueces County

history and safety concerns. We discussed my information needs at SDC Services and the cooperation I had received from SDC's Environmental Manager, Tim Chaney.

0920: The PRC VSI team arrived at SDC Services Inc., at 7500 Greenwood Road, Corpus Christi. Our initial activity was to meet with Tim Chaney to review our study plan with him, make him aware of our information needs, and review facility records for additional data.

0930: Tim Chaney meets us and takes us to his office. The initial meeting tone is positive, Tim is very cooperative.

Tim and PRC ~~represent~~ team member, Frank Robinson, review our past communications. The information needs listed on the

Frank R. Robinson 5/29/12

SDC Services Inc.      Nueces County

Site study Plan are reviewed with Tim Chaney. SDC Services is in the process of re-applying for a hazardous waste permit. Tim gave us a brief review of SDC Services past permit activities and that they had resubmitted a Part A & B Permit application in 1990. We have records of this. SDC is seeking investors to finance the revamping of the facility if the permit is issued. The scope of their services would extend far beyond the current waste oil and UST derived gasoline fuel blending to offering a full range of waste treatment and management services. SDC owns three tracts of adjacent property (two of which are utilized in the <sup>current</sup> SDC operation) and would build this waste management facility on these properties. Tim reviewed SDC's

Frank R. Robinson 5/29/12

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SDC Services, Inc.Nueces County

current waste generation and the materials purchased for blending and resale as fuels. This information confirms the documents we have in SDC TSDF activities. According to Tim:

SDC purchases used oil (waste engine/crank case) and nonhazardous industrial waste oils. The used automotive oils come from small service stations such as Jiffy Lube. Examples of an Industrial source is the local utility (Edison Power & Electric?). SDC also obtains gasoline contaminated waters associated with UST removals.

SDC does no screening of waste oils to verify that there are no hazardous constituents. Tim says that the testing is left to the individual generator unless

Frank R. Robinson 5/29/92

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SDC Services, Inc.Nueces County

SDC has reason to suspect possible contamination due to poor reputation or business practices. If Tim has concerns about waste oil contents usually requests screening by supplier for: Tox, Ignitability, lead and TCL for lead, chromium and benzene.

Frank Robinson discussed the petroleum exclusion under CERCLA and that any analytical data to support a lack of hazardous constituents in the waste oil would be extremely helpful. Tim Chaney indicated that no such data was available and that it was his understanding that the <sup>typical</sup> oil contains lead associated with engine wear. No testing is or has been done by SDC according to Tim for organic chlorides as was to my recollection discussed after a shipment of solvent contaminated oil was discovered at the

Frank R. Robinson 5/29/92



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SDC Services, Inc.Nueces County

Facility.

Tim Chaney showed us typical facility records kept on file by SDC. Documenting the waste oil shipments. There are mostly a volumetric/weight related record of material delivery called a "run" or "trip" ticket that provides no material characteristics information. There were some hazardous waste manifests that were reportedly used as a precautionary measure rather than from a knowledge of the material composition.

Regarding other information requests  
There are no groundwater wells on site. The City of Corpus provides potable water. Tim knows of no

Frank Robinson 5/29/92

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SDC Services, Inc.Nueces County

residences in the vicinity using groundwater for domestic consumption. There is a hazardous waste storage facility (Chemical Waste Management) north of SDC and the municipal landfill is to the east and slightly north of the facility. Additionally the city wastewater plant is north of the Chemical waste facility.

The number of employees at the SDC facility varies. Currently there are approximately 25 personnel, many of which are truck drivers.

Tim will provide a legal description of SDC property along with a map of the facility.

SDC Services has one on site

Frank Robinson 5/29/92

15.

SDC Services, Inc.Nueces County

resident. This employee lives in a trailer on site and acts as a security guard.

There is a property to the north of the SDC property, between SDC and Chemical Waste Management, that operates as an automobile/miscellaneous junk yard.

The south property of SDC is not currently part of the oil recycling activity and contains an office structure labelled "Southwest Environmental Services, Inc."

The structure is used for storage of chemi oil-sorbent product and a proprietary chemical product for reducing salinity in soils. SDC is interested in ~~acquiring~~ using the Southwest Environmental name for

Frank Robinson 5/29/92

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SDC Services, Inc.Nueces Co.

their new waste management operation if permitted

Tim did not know of anybody using groundwater for potable consumption in the area. He suggested contacting Chemical Waste Management as they have done extensive groundwater characterization associated with problems at their facility.

SDC has no monitor wells at their facility. Tim indicated that there are monitor wells to the north of on Chem waste property and at the municipal landfill to the east.

11:15 : Office interview concluded, PRC team and Tim Chaney agree to proceed

Frank R. Robinson 5/29/92



17 SDC Services, Inc. Nueces County

with the site visual inspection.

11:20: Side inspection begins <sup>at</sup> the northeast corner of the SDC facility. Tim Chaney is the SDC representative, Bill Gagnon from PRC is taking photographs and Frank Robinson of PRC is recording notes and reviewing the SDC facility sketch.

Weather conditions are cloudy, temperature is 70°F, approximately and the wind is blowing out of the north to northeast at about 10 mph.

The direction of the site tour will be from the northeast corner going west to the northwest corner, south to the southwest corner and then east to the entrance of the facility.

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SDC Services, Inc.

Nueces County

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The SDC facility has a cyclone ~~fence~~ <sup>front,</sup> fence about five feet high ~~a~~ at the ~~entrance~~ on the east side and the two entrances have sliding gates to limit access. There is no barbed wire on top of the fence.

The main office of SDC Services is located in the NE corner of the facility. It appears to be a wooden structure with a brick facing on the ends. Building dimensions are approximately 75' x 50' and has grey asphalt shingles. The building color is also a light grey. The front area of the facility is paved and the office has some grass landscaping. At the entrance to the facility the paving directs surface drainage to the east where there is a ~~water~~ ditch running parallel to Greenwood road. The major direction of drainage

Frank R. Robinson 5/29/92



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SDC Services, Inc.Nueces County

for the facility is to the west, down the center of SDC Services, towards the small tributary draining into Oso creek called Vollo Creek. This indicates that they have landscaped the unpaved center area of the facility in the past with extra soil to ensure drainage in this westerly direction.

Proceeding in a west direction along the north side of the facility, there is a corrugated metal building about 50 feet from the main building. It is a storage shed about 20x25 feet in dimension. The area around this building is paved. On the east side of this building is an above-ground storage tank of approximately 1000 gal capacity, mounted horizontally, of steel construction and

Frank Q. Robinson 5/29/92

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SDC Services, Inc.Nueces County

used to store gasoline. The shed contents are mostly old tires, hoses and some bags of construction materials or oil spill absorptive materials.

To the north and ~~east~~<sup>west</sup> of this storage shed, about 15 feet away is another storage shed of wooden construction. The dimensions are estimated to be 40x40 feet. In the immediate area around this building, to the south and west is currently being used as a bone yard or scrap yard for old iron and metal materials. This is all on concrete pavement.

Looking north from the SDC property. There is a narrow plot of land bordering this facility that appears to be serving as a junk yard. The vegetation is (weeds)

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high and the property is full of abandoned <sup>cars</sup> truck trailers, boats and truck tractors and remnants of a metal shed. There is a mobile home situated on the north side of the property about 150 feet north of the wood storage shed. There is plenty of vegetation on the lot including trees, shrubs and bushes. None of the vegetation is distressed. The trailer is reported to be an office, not a residence but I did observe a minor <sup>(young boy)</sup> exiting the trailer. Jim Jones - owner  
no well water - on city water

11:25: Continuing west we come to the North Fuel Blanding facility. The approaches to this area are paved with concrete. The area holding the tanks is partially paved and partially enclosed in a concrete retaining wall. The retaining

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covers about 2/3 of the tank area.

Pad  $\approx$  150 feet long  $\times$  70 feet wide.

There are twelve vertical steel tanks on the pad and five on dirt at the west end. All tanks are black.

The discharge valves of the tanks are located about 1-1.5 ft from base of and face the center of the two rows. The concrete pad shows oil stains from past minor spillage. Spillage looks to be operations related - leaking valves, moving hoses, etc.

Drainage from the north fuel blending area is to the west, towards the unpaved portion of the facility and ultimately to the south west corner.

\* First photograph at 11:30 am. - see table

\* 2nd photograph at 11:32 am.

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Further observations on (b) (6) property and property's north. His property is again about 150' wide. North of (b) (6) is the Chemical Waste Management Injection well facility, which also reportedly has three old disposal areas. North of Chemical Waste is the Corpus Christi Municipal sewage treatment plant.

Observations on steel tanks in North blending facility. North row - six tanks on concrete pad are of welded construction. The five tanks at the west end, on the ground are of bolted plate construction. South row - all six tanks are of welded plate construction as well. Tank conditions. - At the north fuel blending

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facility the welded tanks of welded construction look good. The tanks of bolted plate manufacture were also in good condition with the exception of Tank 2000, the most western located tank which had numerous patches <sup>(rust)</sup> and evidence of product leakage. Tim indicated there have been past releases on the unpaved portions of the tank pad. Recovery of the majority of the material has been the usual response. Oil sheen on rainwater runoff has been noted in the past. The five tanks on the ground have a small sheet metal apron around the base that apparently serves to contain small releases. There does not appear to be an impervious bottom to these skirts. The skirt is about ten inches high. There is no berm or containment structure around the north fuel blending facility. Especially at the west end where drainage flows.

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There is no sump to collect or contain spilled material.

\* 3rd photograph @ 11:40

\* 4th photograph @ 11:41

11:45: Move to NW corner of SDC Services property describing land to West. Vollo Creek tributary is nearest surface water to facility and receives runoff. There is an open field between SDC and river about 200 yds long. Slope of land is gradual towards Vollo Creek.

The SDC property is separated from this field by a barbed wire fence (3-stands) mounted on wooden poles. Pavement ends approx. 12' before barbed wire fence. There is a small earthen dike about 2-3 feet

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above grade, in poor repair, running N-S along SDC facility. Pavement at N Fuel Blending Facility is at a higher than this being pretty much neutralizing any containment capabilities of the structure.

There is an abandoned dirt racing car track to the south west of SDC. Some light poles, remnants of the stands and cyclone fencing near the track. The siting of the track is not in accordance with the USGS map and according to Tim Chaney is a was on other peoples property.

Field vegetation : environmental Observations  
Field is mostly grass (native blue stem grass) with heavy growth of bushes and trees in vicinity of Vollo Creek. Trails of bare soil running through field are reported

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by Tim Chaney to have resulted from past releases of brine water (no dates).

These do not appear recent.

No signs of distress to vegetation or visible contamination.

Observations on (b) (6) property to North. Property extends to Oso Creek. Property facing south across open grass field has a cyclone fence about 6' high and topped with barbed wire. (b) (6) property contains more derelict automotive equipment abandoned truck trailers, etc.

\* <sup>5th</sup> Photograph - 11:45

AOC: Southwest corner of concrete pad, part of N Fuel Blending Facility.

Area of concern is a reported chromium

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contaminated sludge, mixed with dirt spread over <sup>unpaved</sup> open center section of facility. The source of the chromium were tank bottoms removed from Tanks 3A and 3C. <sup>Waste Oil</sup> Materials received in these tanks were apparently contaminated <sup>by SDC</sup> and the sludge was removed after <sup>unknown</sup> <sup>made it unusable as a fuel material.</sup> uncharacteristic behavior of materials.

Material was mixed with soil and spread over an area that has not been completely defined. The maximum depth of the contaminated sludge is estimated at 2 Ft. The area is approximately 70-90 ft wide and extends in a N-S direction under a portion of the N Fuel Blending Facility slabs. The best estimate on E-W extent is 150 feet. Tim Chaney has submitted an action plan to the TWC

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to investigate and remediate the site.

There is an existing TWC report on this chrome site.

Some signs of vegetative distress due to open ground areas.

\* 6th Photo - 12:00

Open area containing suspected chrome sludge also has black sand material from sand-blasting activities. No known contaminants associated with sand-blast material.

\* 7th Photograph - 12:02

Loading area of N Fuel Blending Facility located on south side of tanks. Area is mostly paved with some evidence of oil spillage.

\* 8th Photograph - 12:04

Drainage in N Fuel Blending Facility again

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noted to flow to SW corner of unpaved area.

Some standing rainwater noted adjacent to Tank 2000. No signs of oil sheen.

Truck was unloading at time of site inspection

- strong odor of volatile organics - not solvents.

Possible refinery waste? Note All tanks are closed top with vents.

Loading facility has paved truck access in middle of S side of N Blending facility.

There is a small, raised splash wall in vicinity of pipe connections. Max' height of wall 2-3 feet. Area north of wall is

a small, unpaved area with some oil stain on soil. This open soil area

is the location of a 210 barrel below ground horizontal-cylindrical tank.

Exact dimension is unknown but probably aligned in a East-West direction. Access is through a rectangular hatch or cover

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in the form of a metal sheet (see photo).  
 Tank is reportedly utilized as part  
 of the gravimetric separation process.  
 no Piping observed going to tank other  
 than from spill collection point in  
 loading area. Not specifically used  
 for product storage according to Tim.

There is a primitive "shed" at this  
 facility that originated as the  
 covered back of a delivery truck. Use is not  
 clear, possible storage.

\* 9th Photograph - 12:10

Open Area in middle of SDC facility  
 towards west end. Tank 16 is currently  
 utilized to store waste antifreeze.  
 Tanks SA, SB, SC are inactive

Free tank #1 is near Tank 16 and is

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a wheeled tank common to the oil field. There  
 is a skid tank #2 - appears to be an old API  
 separator or drilling mud container.

Tank SA, SB, SC are reported empty with  
 open access hatches evident. Tank SD  
 is still at facility but Tanks 20 & 21  
 are gone as is skid Tank 1.

\* 10th Photograph - 12:12

\* 11th Photograph - 12:15

12:15: Center of SDC Service Facility -  
 unpaved area. Looking East towards  
 "Scrap Iron Storage" observe 4  
 inactive tanks and other metal debris.  
 One unit, a blue skid tank, possibly  
 skid Tank 1 is reported by Tim Chaney  
 to have some tank bottom sludge slated  
 to be removed.

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Noted a cross connection between the North and South Fuel Blending Facilities.

12:18 On the south west side of the SDC facility,

adjacent to the South Fuel Blending facility is a concrete slab of approximate

dimensions 70' x 200'. Tank 1F, previously

in a five tank fuel and solvent storage

area is now situated on the south

side of the slab about 2/3 of the distance towards the west end.

This tank along with a tank trailer

are currently holding a specially channel

product CalSite-1, a soil desalination

treatment. Tank 1F, vertical configuration, <sup>welded</sup> feet

The west end of slab, on the unpaved soil, are four tanks all inactive. These

correspond to previous summary inventory

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as Tanks 15, 17, 18, and 19. No evidence of

material release in Tank vicinity. There is

standing nonwater behind tanks in low areas.

Off the slab, on the soil, to the south west are

three four tanks, inactive, no signs of

material release. No evidence of dispersed

vegetation.

To the west and north of the west end

of the slab are the two ship tanks,

Ship Tank 2 and 3 from the previous

summary inventory data. They are inactive.

South west corner of SDC facility.

There is a newer concrete slab due west of the South Fuel Blending facility. This

slab is reportedly over the original location

of the S. Fuel Blending facility that was

subsequently moved to its current location.

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The slab has a 3 foot concrete wall along the north and south sides. Slab is serving as a temporary storage site for class I nonhazardous wastes packed in 55 gal drums. These include oily soils, and oily absorptive material plus used truck oil filters. <sup>Also used glycol. stored for recycling</sup> Drums are in good condition, numbered and labelled. No evidence of releases. Drums are logged by number. Materials will be handled one more time when sent offsite.

\* 2<sup>th</sup> Photograph - 12:25

Site Security: South side of facility at SW corner. There is ~~now~~ no fence along this southwest side of the facility for the lot approx. 15' of area. There is a partial cyclone fence associated with the abandoned cage truck but not connected

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SOC Services, Inc.Nueces County

with SOC fencing. The fencing on this west side is not adequate to stop or discourage entry.

On the south side of the property, the three strand barbed-wire begins again from ~~west~~ to east but quickly changes to a low, chicken wire composition.

The property to the south of the SOC facility is owned by SOC but is currently idle. There is an office building, used for storage with the sign Southwest Environmental Services, Inc. on it. This property has <sup>several hundred</sup> old abandoned tires piled in the northwest side of the lot. There are a couple of abandoned trucks there. The vegetation is local grass, tall, and wild sunflowers. No signs of releases.

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No distressed vegetation. There are some observed bare spots but do not appear related to chemical releases but more to vehicular traffic.

Note of Interest: The next property south of this unused SDC lot is an open field that is reportedly being used as a contaminated soil landfarm for soil from UST excavations.

This property is adjacent to the banks of Osu Creek and also extends to the edge of Volto Creek. Also the soil is on the abandoned race track. The company reported to be involved in this is Sussex Environmental.

\* 13th Photograph - 12:32

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\* Panoramic photo sequence of SDC facility from west end looking east. - 12:35

Photos 14, 15, 16, 17, & 18

Open, unpaved area between middle slab, temporary Class I drum waste storage slab and South blending facility. Soil is a sandy-caliche looking material. No evidence of material release here.

12:40:

South Fuel Blending facility. is the oldest process area of SDC. Reportedly has been moved from a more westerly location. A new slab on old location. The fuel blending facility has 12 vertical steel tanks on soil. There is a low soil berm or dike partially enclosing the tanks. The berm is at a maximum 2-2½' high and is in best condition on the west end and slowly erodes as it heads in a easterly

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direction. This enclosure would offer little containment in the advent of a spill. No major indications of recent release were noted. Small stains from routine operations were evident. The tanks on south side are of bolted plate construction. The north side tanks are welded steel plate construction.

The loading facility at the S Fuel Blending facility is a concrete slab approximately 60-70' long x 15' wide. There is a plywood wall in the area of the pipe connections. The wall is about 30' long & 3' high.

There are signs of localized spills of hydrocarbon in the loading areas.

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There is a below ground tank at the S. Fuel Blending Facility. Like the tank at North facility it is right behind the loading pipes and is reported to be a 210 bbl tank, steel and of a horizontal configuration. The access to the tank is a square, open hatchway, covered with a grate, with a number of hoses and a pipe leading to the opening. There is a slight berm around the hatchway acting as an overflow containment area. Tank is believed to be configured in a N-S direction.

I cannot fathom how these vessels are utilized in this gravimetric process except as a below ground sump for the collection and temporary storage of sludges, sediments and tank bottoms. At both tanks, tanker trucks, and storage tanks have access to these sump/tanks.

Frank R. Polman

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41.

SDC Services, Inc.Nueces County19<sup>th</sup> Photograph - 12:4420<sup>th</sup> Photograph - 12:4512:45 Further comment on <sup>soil</sup> berm around S.

Fuel Blending Facility. Close inspection at east end confirms that there is <sup>essentially</sup> no remaining containment structure at the east and north side of the S. blending facility.

There are two metal sheds located at the NE corner of the S. Fuel Blending facility. One is a primitive laboratory and the other is a chemical storage shed.

Warning signs (no smoking) are posted on both buildings and a fire extinguisher was evident.

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There is a fracture located on the East side of the South Fuel Blending Facility. This is the welded, oil fired type tank. Designated Frac 6 on previous SWMU inventory.

12:50: Progressing East on S. side of SDC property. Approximately 40' from blending facility return to general pavement. Approximately 150' from facility is a large metal maintenance shed with an inactive gasoline tank on west side of building. Tank (6F) is about 25' from the maintenance building. Vertical tank, steel, silver, welded seam construction. Tank located on wood piles.

21<sup>st</sup> Photograph - 12:51

Commodity chemical and fuel storage area

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in central part of SDC facility. From previous inventory, tanks/summs are noted as 1F, 2F, 3F, 4F and 5F. Tank 1F was moved to the center slab area and converted for use as a storage vessel for CalSite-1.

Remaining tanks (2, 3, 4 & 5F) are contained within an old soil berm in poor condition. Sand blasting material in area - probably associated with refurbishing of Tank 1F.

12:54:

AOC: Distressed vegetation along interior edges of berm. Associated with recent release. Speculate material release from movement of Tank 1F? There is no vegetation around tanks in this area. No visible chemical

Frank R. Robinson 5/29/12

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stain, only distressed vegetation. Containment area has no impermeable properties. Previous inventories indicate Tank 1F held gasoline. Tim Chaney indicates it was diesel.

22nd - Photograph - 12:56

1300 Progressing in East direction on site tour, along S side of facility.

Prefabricated metal maintenance building previously noted. Tan in color (light). Approx dimensions 50' x 100'. Located on concrete slab. There is a below grade trench for easy access to under chassis of trucks on the NE corner of building.

No evidence of hydrocarbon releases in this area.

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Adjacent to this maintenance bldg. on south side of SDC property and in East corner is a mobile home, on-site residence of the security person. Mobile home is 18' x 14' ten with brown trim. Office structure from a prefabricated wooden building is located next to the southeast entrance to the SDC facility, inside the compound. This is associated with a subsidiary SDC business, oil field related, and is not always occupied.

\* Panoramic Photograph Sequence of SDC facility from East End, looking west. — 1305 Photos 28, 29, 30, 31, 32

Southeast entrance to SDC Facility

Frank Gehring

5/29/12

SDC Services, Inc. Nueces County

Observed posted signs on fence "Do not enter, authorized personnel only" and "No Smoking". Several posted on fence. It

Office on south property owned by SDC is white, metal, prefab. Southwest Governmental Services sign in front.

\* Photograph 27 — ~~1300~~ 13:10

Copco Christi Municipal dump, active area. Located East of SDC and extends from NE corner of SDC property line North to edge of criminal waste. New development work to extend dump occurring south and adjacent to SDC East side.

The landfill is enclosed in a 20-30' high mesh screen fence.

13:15: End of Site Inspection








Frank D. Gehring

5/29/12



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Legend

-  cyclone or mesh fence  
 barbed wire fence  
 cyclone with barbed wire  
 30' mesh fence  
 APC  
 edge of pavement  
 Trees

Not To Scale

Chemical waste	Injection well
	Facility

(b) (6)

Propriety

5- Grass Field - ?

Direction  
of Drainage

North Fuel Blending Facility

main  
office

AOC

Center Slab

(Fuel storage

LAGC

South Face  
Blending

Maintenance	Shed
-------------	------

mobile

mobile

SDC Southwest

Environmental Services	Property
------------------------	----------

Frank Robinson

5/27/92

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Municipal  
Landfill

Future  
Landfill  
Area

2



Corpus Christi:

Nueces County

1435:

U.S. Fish &amp; Wildlife Office

University of Corpus Christi:

Ward Island

Frank Robinson called on the U.S. Fish and Wildlife to collect information on sensitive environments, rookeries, fisheries, wetlands and endangered species. I had talked to Mariellene Vega, of this office, on May 28, 1992 and while she was not going to be available had promised to leave some information. Mariellene's secretary assisted me in photocopying the information. Visited with Tim Cooper about endangered species.

1655:

Departed Corpus Christi ending VSI activity.

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